

# 2018 – 2019 Course Descriptions

## Theology (Courses offered in a rotating cycle over four year))

- 101 Divine Revelation and Sacred Scripture
- 102 New Testament
- 103 The Paschal Mystery
- 104 The Sacraments
- 105 The Church and World Religions
- 106 Who Is Jesus Christ?
- 107 Christian Morality: Life in Jesus Christ
- 108 Catholic Social Teaching

## English (Core courses)

- 201 Literature and Composition
- 202 Literature and Composition HONORS
- 203 American Literature
- 204 American Literature HONORS
- 205 World Literature
- 206 World Literature HONORS
- 207 Contemporary Literature and Composition
- 208 AP English Literature & Composition\*
- 215 Contemporary Literature and Composition HONORS

## Mathematics (Core courses)

- 301 Algebra I
- 302 Algebra II
- 310 Algebra II HONORS
- 303 Geometry
- 309 Geometry HONORS
- 304 Pre-Calculus/Trigonometry HONORS
- 305 College Algebra/Trigonometry
- 306 Calculus I HONORS\*
- 307 Calculus II HONORS
- 308 Statistics & Probability\*

## Science (Core courses)

- 401 Biology
- 402 Biology HONORS
- 403 Chemistry
- 404 Chemistry HONORS
- 405 Physics I
- 406 Physics I HONORS
- 407 Chemistry II HONORS\*
- 418 Chemistry III HONORS\*
- 408 Biology II HONORS\*
- 414 College/High School Physics\*
- 413 Energy & Environmental Science
- 420 Anatomy and Physiology I (.5)
- 421 Physiology II (.5)

## Social Studies (Core courses)

- 500 U.S. History
- 506 U.S. History HONORS
- 516 World History I
- 517 World History I HONORS
- 526 World Cultures/World Cultures HONORS
- 507 AP European History\*
- 510 AP United States History\*
- 508 U.S. Government (Q3)
- 519 Global Issues (Q4)
- 518 Economics (Q2)
- 520 Senior Seminar (Q1)

World Language (Core courses)

- 601 Spanish I
- 602 Spanish II
- 603 Spanish III
- 604 Spanish III HONORS/Dual Enrollment\*
- 605 Spanish IV HONORS/Dual Enrollment\*
- 606 Spanish V/Dual Enrollment\*
- 608 French III HONORS
- 622 Latin I
- 623 Latin II

Marketing & Business (Semester courses)

- 703 Business Dynamics
- 704 Business Marketing
- 710 Business in a Global Society\*
- 705 Accounting I
- 706 Intro to Finance
- 707 Intro to Supply Chain Management

Science, Technology & Engineering Electives (Semester courses)

- 731 Pre-Engineering I/Intro to Engineering
- 732 Pre-Engineering II
- 733 Intro to Health Occupations
- 735 Intro to CAD/Computer Aided Drafting
- 733 Computer Science I
- 784 Computer Science II
- 783 Web Design
- 416 Horticulture
- 417 Wildlife Biology

Fine Arts Electives (Semester courses)

- 809 A' Cappella Choir
- 805 Instrumental Music Ensemble
- 818 Music Through the Ages
- 801 Intro to Art
- 817 3-Dimensional Art/Sculpture
- 812 Drawing I
- 808 Painting I
- 815 Drawing and Painting II
- 816 Independent Studio Art
- 741 Video Imaging
- 210 Theatre

Social Science and Pre-Career Electives (Semester courses)

- 901 Child and Family Studies
- 571 Intro to Psychology
- 572 Intro to Sociology
- 220 Creative Writing
- 222 Media Studies
- 223 Communications
- 583 Intro to Legal Studies

General Studies (Semester courses)

- 911 Nutrition/Wellness
- 960 Driver Education
- 415 Health
- 416 Personal Wellness
- 902 Pre-College Seminar w/SAT & ACT Prep

\*These courses are offered for Dual Enrollment. Students may choose to earn college credits for a minimal cost.

# Theology

The goals of the Theology Department are:

- To develop an understanding of the basic teachings of the Gospels, the Holy Trinity, and the role of Jesus Christ and the Church
- To provide the environment for a student to accept the grace to establish a vision of morality, both a personal and social dimension, based on Gospel teaching and values
- To provide opportunities for a student to examine his or her own faith journey, as well as the faith and journey of others on similar and distinctly different paths

All students are required to pass Theology courses each year. Christian service is required of all students for graduation. Theology courses link religious education and faith formation.

The Theology Curriculum consists of eight one-semester courses. Students take all eight courses over the four years at SJCA.

## 101

### Divine Revelation and Sacred Scripture

0.5 CR

This course leads students toward a deeper understanding of the Bible and the history of our salvation presented within it. The students learn to navigate the Bible and use basic exegetical and interpretive skills. They examine the relationships among Revelation, Inspiration, and vocation. They learn why the Christian faith asserts that salvation is necessary. They then come to know the people of salvation history: the early leaders of Israel, the judges and kings, and the prophets. They explore the notion that Jesus Christ is the fulfillment of salvation history and the Israelites' covenant relationship with God. Finally, they learn about the early Christian Church with a focus on Saint Paul and other key figures of the time.

## 102

### New Testament

0.5 CR

This course leads students toward a deeper understanding of the New Testament and the Catholic approach to Scripture. The course starts by examining the relationship between the Old Testament and the New, as well as the essential role of Scripture in the life of the Christian community. The students then explore three exegetical methods in the Catholic approach to Scripture and the development of the New Testament canon. Subsequent units delve into the history, Christology, and ecclesiology of the books of the New Testament, beginning with the synoptic Gospels (Matthew, Mark, and Luke) and the Gospel of John, and then exploring the Acts of the Apostles, the Pauline and Deutero-Pauline Letters, the Book of Revelation, and the later first-century letters.

## 103

### The Paschal Mystery

0.5 CR

This course leads students toward a deeper understanding of our need for redemption and how Jesus is the fulfillment of God's promise of redemption. The course explores how, through his suffering, death, Resurrection, and Ascension, Jesus makes our redemption possible. The course also addresses how we continually experience the Paschal Mystery in our lives and the liturgy of the Church. Building on a prior theology course called "Who is Jesus Christ?" this course provides students a more extensive understanding of Christology (the study of Christ).

## 104

### The Sacraments

0.5 CR

This course leads students toward a deeper understanding of the liturgy and of the Sacraments, instituted by Christ and given to us through the Church. The course first explores foundational concepts integral to an understanding of liturgy and Sacraments: an expanded definition of liturgy, the liturgical year, and what we do when we celebrate liturgy. The Sacraments are first introduced through an exploration of symbols and rituals, followed by a presentation of the Sacraments as signs and encounters with Christ in our lives. The Sacraments are then considered in their appropriate groupings: the Sacraments of Initiation, the Sacraments of Healing, and the Sacraments at the service of Communion.

105

## The Church and World Religions

0.5 CR

This course leads students toward a deeper understanding of the Church as the means to encountering the living Jesus. Students further explore the origin, the human and divine elements, and the ongoing mission of the Church. Additionally, the students explore the Church's ongoing movement and interreligious dialogue. Finally, the course explores the major tenets of various world religions such as Judaism, Islam, Taoism, and others.

106

## Who is Jesus Christ?

0.5 CR

This course leads students toward a deeper understanding of divine Revelation, the Trinity, the Incarnation, Jesus' significant relationships, Jesus' teachings, Jesus' example, salvation, and discipleship as a response to God's love. As Joseph Cardinal Ratzinger (Pope Emeritus Benedict XVI) has written, as Christians, "our departure point is a person, not a program." This course examines the Person of Jesus Christ - who he actually was and is.

107

## Christian Morality: Life in Jesus Christ

0.5 CR

This course leads students toward a deeper understanding of God's Law revealed to us through reason and Revelation. The course explores how Christ's life and teaching is the fulfillment of the Old Law summarized in the Ten Commandments. Thus, the content of the course is informed by the moral law in the Old Testament, by Christ's moral teaching in the Gospels, and by the moral teaching of the Church as it applies to what God has revealed to our contemporary moral questions. The New Law of Christ calls us to go beyond keeping moral minimums and to love God, neighbor, and self with all our being. We can only do this with God's grace. In the end, Christian morality is about responding to God's love by living in full communion with God and others.

108

## Catholic Social Teaching

0.5 CR

This course leads students toward a deeper understanding of the rich tradition of Catholic social teaching. The course starts by examining the foundations of Catholic social teaching in Scripture and Tradition. The students then explore the tremendous growth in this teaching over recent centuries as the Church has responded to rapid and far-reaching changes in society. Later units explore specific social issues, such as protecting human life at its beginning and at its end, poverty and hunger, war and peacemaking, economic justice, and environmental justice. Throughout this course, students are called upon to reflect on Christ's call to live justly and confront sinful social structures.

## Campus Ministry

- The Campus Ministry and Theology Departments offer retreat programs for all grade levels. These retreats are an integral part of our school program and the religion curriculum and are required for all students.
- Each year all students must fulfill academic work in religion classes, retreats, and service hours (25).

# English

The goals of the English Department are the:

- Equal emphasis on language skills, writing and literature as well as public speaking throughout each course
- Development of information literacy: acquiring and processing information
- Application of technology to writing and research projects

## Course Offerings

9th Grade	Literature and Composition Literature and Composition HONORS
10th Grade	World Literature World Literature HONORS
11th Grade	American Literature American Literature HONORS
12th Grade	Contemporary Literature & Composition/HONORS AP English Literature & Composition*

## 201

### Literature and Composition

#### 1 CR

Literature and Composition introduces ninth-grade students to a variety of literary genres, including short stories, novels, essays, drama and poetry. The course emphasizes personal writing and class discussions as effective means of exploring literature. Moreover, students learn to approach writing as a process in a broad range of narrative, descriptive and persuasive composition tasks. They also write essays of literary analysis, beginning with paragraphs and progressing to the multi-paragraph theme. Other areas of study include vocabulary, public speaking, study skills, and a review of grammar and mechanics.

## 202

### Literature and Composition HONORS

#### 1 CR

Honors Literature and Composition is designed for ninth-grade students who are self-motivated and willing to work at an accelerated pace on tasks requiring higher-level thinking skills. The course stresses strong critical reading and writing skills in a variety of literary genres and a broad range of composition tasks. The greatest emphasis is on literary analysis in writings and class discussions. Students also engage in creative writings and oral presentations in small- and whole-group settings. Additionally students build a foundation of public speaking skills, with an emphasis on persuasive speaking. Other areas of study include vocabulary, study skills and a review of grammar and mechanics. Much of the work in these areas is performed as independent study.

## 203

### American Literature

#### 1 CR

In American Literature junior-year students study American literature with a concentration on narrative and thematic element and the use of literary devices. The genres covered include short story, novel, poetry, non-fiction and drama (including Shakespeare). The writing program focuses on the thesis essay, literary analysis, literary criticism, persuasive and argumentative essays, and research writing with an emphasis on the proper documentation of sources using MLA style. Additional skill development includes vocabulary, grammar review, note-taking, small- and large-group work, and both formal and informal oral presentations.

## 204

### American Literature HONORS

#### 1 CR

In Honors American Literature junior-year students study American literature with a concentration on narrative and thematic elements and the use of literary devices. The genres covered include short studies, novel, poetry, non-fiction, and drama (including Shakespeare). The emphasis in

writing focuses on responding to and analyzing literature. Students continue to learn to develop a thesis statement and support it in a multi-paragraph essay. The introduction to research skills includes MLA style to properly document sources and the interpretation of literary criticism. Grammatical concepts are emphasized through writing and speaking activities. Vocabulary workbooks and literature continue to serve as the source of vocabulary development. Speaking activities center around informal discussions and formal oral presentations.

## 205

### World Literature

#### 1 CR

World Literature for sophomore students combines vocabulary development, research and writing skill development, and practice in a variety of modes of public speaking with extensive reading and writing. The course organization focuses on common themes that permeate literature from the ancient literatures of Greece, Rome, and the Middle and Far East all the way through contemporary world literature. The course themes are: the hero and the hero's quest, the search for meaning and identity, the paradox of progress, and the individual and society. Students practice the writing process in activities designed to assist them in finding their own voice in writing and in developing a mature style.

## 206

### World Literature HONORS

#### 1 CR

Honors World Literature sophomore students is designed for students who are self-motivated and willing to work at an accelerated pace on tasks requiring higher level reading, writing, and thinking skills. The course combines vocabulary development, research and writing skill development, and practice in a variety of modes of public speaking with extensive reading and writing. The course organization focuses on common themes that permeate literature from the ancient literatures of Greece, Rome, and the Middle and Far East all the way through contemporary world literature. Students practice the writing process in activities designed to assist them in finding their own voice and in developing a mature style through increasingly independent writing experiences.

## 207

### Contemporary Literature and Composition

#### 1 CR

Contemporary Literature and Composition allows high-school seniors to explore literature and to expand both writing and public speaking skills in order to prepare them for college. The course content gives students a broad background in the literature genres of fiction, poetry, drama and creative non-fiction. Learning activities stress analytical skills, application and synthesis of literary concepts and theories, analysis and use of rhetorical elements, and college-level composition skills.

## 208

### AP English Literature & Composition\*

#### 1 CR

Advanced Placement English Literature & Composition provides talented high-school seniors with a college-level seminar that prepares them to take the Advanced Placement examination. The Advanced Placement test includes both objective and essay sections and challenges students' ability to read prose and poetry. Advanced Placement English Literature & Composition has a rigorous reading requirement, which gives the students a broad background in the four major genres of fiction, poetry, drama and non-fiction. Course activities emphasize analytical skills and textual analysis, application and synthesis of literary concepts and theories, assessment of rhetorical elements in both written and oral arguments, and college-level composition skills. The course content provides students with a stimulating atmosphere through activities that challenge and help develop logic, creativity, insight, leadership potential, and technical skills. Students may take this as a 3-credit course through Mount Aloysius College.

## Contemporary Literature and Composition HONORS

### 1 CR

Honors Contemporary Literature and Composition provides an opportunity for high-school seniors who possess strong reading and writing skills to explore literature of the twentieth and twenty-first centuries and to expand both writing and public speaking skills in order to prepare them for college. The course content gives students a broad background in the literature genres of fiction, poetry, drama, creative non-fiction, and non-verbal texts. Learning activities stress analytical skills and textual analysis, application and synthesis of literary concepts and theories, analysis and use of rhetoric and rhetorical elements, and college-level composition skills.

## Mathematics

The goals of the Mathematics Department include:

- To place strong emphasis on the essential algebraic, numeric and geometric skills with problem-solving, investigative and explanatory work;
- To challenge the mathematically talented student, as well as to provide a solid foundation for all students.

### Course Offerings

9th Grade	Algebra I Algebra II Geometry
10th Grade	Algebra II HONORS Geometry HONORS Pre-Calculus/Trigonometry
11th Grade	Algebra II Pre-Calculus/Trigonometry HONORS AP Calculus
12th Grade	College Algebra/Trigonometry Pre-Calculus/Trigonometry HONORS Calculus I HONORS* Calculus II HONORS* Statistics and Probability*

Students will be required to take four years of mathematics.

### Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
Algebra 1	Geometry or Geometry HONORS	Algebra II or Algebra II HONORS	Pre-Calculus/Trig HONORS
Geometry* or Geometry HONORS	Algebra II or Algebra II HONORS	Pre-Calculus/Trig HONORS	College Algebra /Trig
		College Algebra/Trig	Calculus I HONORS*
Algebra II** or Algebra II HONORS	Pre-Calculus/Trig HONORS	Calculus I HONORS*	Calculus II HONORS
Other	Other	Other	Statistics & Probability*

\*To begin Geometry in 9th grade, students need to have taken Algebra I in 8th grade.

\*\* To begin Algebra II in 9th grade, students need to have taken Algebra I in 7th grade and Geometry in 8th Grade.

301

## Algebra I

1 CR

Algebra I is the foundation for high school mathematics. It is a bridge from the concrete to the abstract study of mathematics. Topics include expressions, equations and inequalities, graphing linear and quadratic functions and relations, polynomials and factoring, exponents and radicals. Applications are presented throughout the course and a function's approach is emphasized. Scientific calculators are used when appropriate for instruction and assessment.

302

## Algebra II

1 CR

This course extends the topics first seen in Algebra I and provides advanced skills in algebraic operations. Additionally, linear systems, matrices, a variety of functions, conic sections, sequences and series will be explored. Graphing calculators are used regularly for instruction and assessment.

310

## Algebra II HONORS

1 CR

This course extends and deepens the topics of the regular course. Additionally probability and statistics and periodic functions and trigonometry will be explored. Graphing calculators are used regularly for instruction and assessment.

303

## Geometry

1 CR

This course emphasizes the study of the properties and applications of geometric figures in two and three dimensions. It includes the study of transformations and right triangle trigonometry. Inductive and deductive thinking skills are used in problem solving situations and proof writing. Scientific calculators are used for instruction and assessment.

309

## Geometry HONORS

1 CR

This course extends and deepens the topics of the regular course. Additionally geometric probability, vectors, and advanced circle properties will be explored. Scientific calculators are used for instruction and assessment.

304

## Pre-calculus with Trigonometry HONORS

1 CR

This course provides students an honors level study of trigonometry, the twelve basic functions, systems and matrices, analytic geometry in two and three dimensions and discrete mathematics in preparation for calculus. Applications and modeling are emphasized throughout the course of study. Graphing calculators are used regularly for instruction and assessment.

305

## College Algebra with Trigonometry

1.0 CR

This course integrates trigonometry and advanced topics of algebra not previously learned. It concurrently reviews all-important topics from Algebra and Geometry, enabling students to prepare for pre-calculus or college level algebra courses. Graphing calculators are used regularly for instruction and assessment.

## 306

### Calculus I HONORS\*

#### 1.0 CR

This course includes differential and integral calculus with applications of previous math courses. Topics include: limits of a function, continuity, derivatives and their applications, the definite integral, differential equations and mathematical modeling. Graphing calculators are used regularly for instruction and assessment.

## 307

### Calculus II HONORS

#### 1 CR

This course extends and deepens the topics covered in the regular course. Additional topics include applications of definite integrals, applications from science and statistics, sequences, and L'Hopital's Rule. Graphing calculators are used regularly for instruction and assessment. Students will prepare to take the College Board Advanced Placement AB Exam.

## 308

### Statistics and Probability\*

#### 1 CR

This course is an introduction to the fundamental topics of probability and statistics, including topics exploring data: describing patterns and departures from patterns; sampling and experimentation: planning and conducting a study; anticipating patterns: exploring random phenomena using probability and simulation; and statistical inference: estimating population parameters and testing hypotheses.

# Science

The goals of the Science Department are:

- To provide an education in science that will allow each student to become scientifically literate
- To provide an education in the life and physical sciences
- To have a working knowledge of the major concepts of science
- To maximize hands-on laboratory experience
- To develop information literacy; acquiring and processing information will be stressed in all courses

### Course Offerings

9th Grade

Biology I

Biology I HONORS

10th Grade

Chemistry I

Chemistry I HONORS

11th Grade

Physics I

Physics I HONORS

12th Grade

**Students must select one below:**

Energy & Environmental Science

Biology II HONORS\*

Chemistry II HONORS\*

Chemistry III HONORS\*

College/HS Physics (Calculus required)\*

Anatomy & Physiology I and Physiology II

Students will be required to take four years of science.

401

## Biology I

1 CR

Biology I is an introductory biology course that addresses basic principles of modern biology and emphasizes the relationships among living organisms from microbes to multicellular eukaryotes. Students will be expected to 1) understand and apply fundamental concepts in cellular and molecular biology, genetics, evolution, ecology, photosynthesis, cellular respiration, growth and development, and human anatomy and physiology and to 2) work collaboratively to analyze and interpret figures, formulate hypotheses, design experiments, and to apply critical thinking and knowledge of the fundamentals of biology to solve problems and to make predictions.

402

## Biology I HONORS

1 CR

Biology I Honors is an introductory biology course that addresses basic principles of modern biology and emphasizes the relationships among living organisms from microbes to multicellular eukaryotes. This course is for advanced and well-organized students with a strong aptitude in science who will engage in additional laboratories, conduct independent reading in scientific literature, and who will be challenged with higher-level critical thinking, reasoning, and problem-solving assessments. Students will be expected to 1) understand and apply fundamental concepts in cellular and molecular biology, genetics, evolution, ecology, photosynthesis, cellular respiration, growth and development, and human anatomy and physiology and to 2) work collaboratively to analyze and interpret figures, formulate hypotheses, design experiments, and to apply critical thinking and knowledge of the fundamentals of biology to solve problems and to make predictions.

403

## Chemistry I

1 CR

Standard Chemistry gives students a basic understanding of how atoms, elements, and molecules are part of our everyday life. The course builds from the smallest particles and properties to a larger focus on molecules and reactions. Laboratory experiments are designed to emphasize the scientific method of investigation as well as develop good laboratory techniques. Basic biochemistry, matter and change, measurement, atomic structure, electrons, the periodic table, bonding, molecular geometry, and chemical quantities are some of the topics covered.

404

## Chemistry I HONORS

1 CR

Honors chemistry gives students a solid chemistry foundation in which to add more advanced topics in consecutive years. The course builds from the smallest particles and properties to a larger focus on molecules and reactions. Laboratory experiments are designed to develop the principles learned in class and to teach the mathematical development of these principles. A greater degree of self-motivation and independent study is expected of students in honors chemistry than in general chemistry. Basic biochemistry, matter and change, measurement, atomic structure, electrons, the periodic table, bonding, molecular geometry, and chemical quantities are some of the topics covered.

405

## Physics I

1 CR

Physics is designed to prepare the student to pursue science courses at the college level. The course covers the principles of mechanics, energy, electricity and magnetism, wave mechanics, sound, light, optics, and atomic and nuclear physics. The course emphasizes problems and laboratory experiments to explore, demonstrate and extend the principles covered.

406

## Physics I HONORS

1.0 CR

This two-semester laboratory course is an elective for students who excel in math and science. Explanations of the physical phenomena occurring in the universe are explored. Systematic investigations will be conducted, and students will make practical use of their knowledge by conducting experiments and completing research and small group projects. These projects are designed to evaluate the knowledge of the completed physics principles.

Prerequisite: Enrollment in Pre-Calculus or College Algebra with Trigonometry.

407

## Chemistry II HONORS\*

1 CR

Chemistry II Honors is a course designed for the seriously committed science student. Solution chemistry and stoichiometry, reactions types, thermochemistry, thermodynamics, equilibria, rate studies, atomic theory, bonding theories and electrochemistry are covered in great detail. Appropriate laboratory sessions supply the practical application of the theory presented. Lab time is lengthy. This course is designed for any student who will major in science and be required to take chemistry. Students have the option of taking this course for college credits through Saint Francis University. Students will also compete in the Chemistry Olympiad in the spring semester.

408

## Biology II HONORS\*

1 CR

Biology II Honors is designed to be the equivalent of a full semester college-level introductory biology course. As such, students must allot considerable time for preparation, be highly motivated self-learners, be well organized, and exhibit a strong aptitude for the life sciences. Students will be expected to master material in the areas of cellular and molecular biology, genetics, evolution, ecology, growth and development, animal behavior, photosynthesis and respiration, and comparative physiology. Students will exhibit mastery of the material by taking active roles in the class by conducting mini-lectures, designing active learning and laboratory experiments, critiquing scientific literature, and writing a scientific manuscript and/or producing a scientific poster of independent or group research. The goal of this course is to capture the nature of science in the classroom and produce students who will be well equipped for college-level biology or earn college-level credit upon completion.

409

## CHEMISTRY III

1 CR

This course is designed to expand on topics in inorganic chemistry and biochemistry as well as covering basic college-level organic topics. The course will also include a research and teaching component. Students will participate in the Pennsylvania Junior Academy of Science research presentation in the spring semester as well as the chemistry Olympiad. In addition students take part in the tutoring and teaching of other peers at SJCA.

414

## College in High School Physics\*

1.4 CR

The CHS Physics Program is a specially designed program that offers students the opportunity to take a first term, college level lecture-demonstration-laboratory sequence in physics for science and engineering students. Calculus is used as needed and should be taken at least concurrently. Subjects covered include kinematics, Newton's laws of motion, energy, momentum, rotational motion, angular momentum, gravitation, oscillations, mechanical waves, and kinetic theory. Students who successfully earn a C letter grade or higher can receive 4 college credits accredited through the University of Pittsburgh. *Prerequisites: Honors Physics, Pre-Calculus; prior course in Calculus or current year.*

## 413

### Energy and Environmental Science

1 CR

Energy and Environmental Science explores society's need for energy and the environmental impacts associated with our pursuit of energy. Through application of scientific principles, concepts, and methodologies, students will analyze the interrelationships of the natural world. The course will present environmental problems both natural and man-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Environmental Science is an applied science that has deep roots in problem solving. In the class, students will be able to apply knowledge from the basic sciences and mathematics to these interdisciplinary practical global problems. The main focus will be to attempt to understand how the biosphere changes naturally and how human activities are altering it. Topics will include basic energy types, water resources and agricultural practices, mining, population growth, and petroleum extraction.

## Social Studies

The goals of the Social Studies Department include:

- Strong emphasis on geography, economics, civics and government as well as historical viewpoint
- Development of information literacy and research records; acquiring and processing information will be stressed in all courses
- Emphasis on the use of primary documents and historical research

### Course Offerings

9th Grade	United States History United States History HONORS
10th Grade	World History I World History I HONORS
11th Grade	AP United States History* AP European History* World Cultures World Cultures HONORS
12th Grade (All four required)	Senior Seminar Economics Global Issues Government

Students will be required to take four years of social studies.

## 500

### U.S. History

1 CR

This comprehensive survey will focus first on the foundations of American society; move through the antebellum era, the Civil War, Industrial Revolution and into the twentieth century. Among the many topics students will study in depth are; the Progressive Movement, the Great Depression, twentieth century conflict, the Cold War, Civil Rights and the enduring issues facing our nation. Students will develop historical thinking skills such as chronological reasoning, comparison and contextualization, historical argumentation, interpretation and synthesis in this full year course.

## 506

### U.S. History HONORS

1 CR

This comprehensive survey will focus first on the foundations of American society; move through the antebellum era, the Civil War, Industrial Revolution and into the twentieth century. Among the many topics students will study in depth are; the Progressive Movement, the Great

Depression, twentieth century conflict, the Cold War, Civil Rights and the enduring issues facing our nation. Students will develop historical thinking skills such as chronological reasoning, comparison and contextualization, historical argumentation, interpretation and synthesis in this full year course.

505

## AP U.S. History\*

1 CR

*(Permission of instructor required and recommendation of previous teacher)*

Advanced Placement U.S. History is a survey course on the college level that examines the development of the American nation from the colonial period to the present. Students will be assigned test-type materials to read weekly, and essay-type tests will be given. Students also will be required to write essays that will demonstrate their ability to analyze, research and evaluate major themes, events and people in U.S. history. Excellent reading and writing skills are required. A summer reading assignment will be given, from which a paper will be submitted at the beginning of the new school year.

516

## World History I

1 CR

World History provides students with an understanding of the development of Eastern and Western civilizations. Students learn how the interaction of people and ideas leads to the emergence of different political, economic, social and religious systems throughout history. Art, architecture, literature and music from a variety of cultures will allow students to gain an appreciation for the contributions of all cultures to today's global community. This course lays the foundation for in-depth analysis of historical events and the impacts they have. In addition, the course helps build students' understandings of other cultures.

517

## World History I HONORS

1 CR

World History provides students with an understanding of the development of Eastern and Western civilizations. Students learn how the interaction of people and ideas leads to the emergence of different political, economic, social and religious systems throughout history. Art, architecture, literature and music from a variety of cultures will allow students to gain an appreciation for the contributions of all cultures to today's global community. This course lays the foundation for in-depth analysis of historical events and the impacts they have. In addition, the course helps build students' understandings of other cultures. Analyzing and interpreting historical events and documents in formal analytical writings form an integral part of students' work in course.

525

## World History II

1 CR

World History II offers a survey of the contemporary world, from the World Wars to the modern era. Attention will be paid to the phenomena of globalization and its effect on the development of world politics and international affairs. Students will gain experience in research, writing, and presenting on a variety of social subjects, drawing connections from historical events and decisions to the current global landscape.

507

## AP European History\*

1 CR

*(Permission of instructor required and recommendation of previous teacher)*

This course offers motivated students an opportunity to meet rigorous academic challenges as we examine the development of Europe from 1350 to the present. Emphasis is placed on critical analysis of European political, economic, social and diplomatic issues leading up to and

impacting events in the twenty-first century. This course presents college-level secondary and primary texts, assignments, and assessments. It is offered as a 3-credit course through Mount Aloysius College; students will also be prepared to take the A.P. exam in European History.

## 508

### Government

.25 CR

This course is an introduction to development and nature of comparative politics, constitutional arrangements, government structure and the electoral process in the American governmental system and governments across the globe.

## 518

### Economics

.25 CR

This course is centered on analysis of the global economy, emphasizing the nature and interrelationships of such groups as consumers, business, governments, labor, and financial institutions. This course will also emphasize personal finance as a part of the Senior Seminar.

## 519

### Global Issues

.25 CR

This course is intended to provoke deliberation, discussion and debate regarding enduring issues facing our local, national and global community. As the final element in the senior seminar students will prepare themselves to be thoughtful citizens who are sensitive to the issues of an ever-changing world.

## 520

### Senior Seminar (with Economics, Government & Global Issues)

.25 CR

In the first segment of this course, students will develop a Personal Mission Portfolio that will serve as a culmination of their careers at Saint Joseph's. Each student will present his or her portfolio during the school year. The portfolio will include; academic records, service experience, career exploration, a resume and written reflections as well as a personal mission statement.

## World Language

The goals of the World Language Department include:

- Compulsory three years at the high school level study of a world language.
- Strongly advised that all students complete three years at the high school level in the same language, but may opt for two years in one language and two years in another.

World Language expectations vary widely from institution to institution, particularly at very competitive colleges, universities or military academics. Students should verify the expectations of any institution of higher education that being considered

## 601

### Spanish I

1 CR

This introductory course is designed for students with little or no previous study of Spanish. Some students in class might have studied Spanish in middle school, but have not grasped some of the important structures of the language. This course teaches basic language patterns and vocabulary. Repetition and comprehensible input are important components of this course. Focus is on all four language skills listening, speaking, reading and writing.

602

## Spanish II

1 CR

Students continue to further develop and improve listening, speaking, reading and writing skills. Emphasis is placed on comprehension of Spanish, as well as, reading and writing practice in the target language using a variety of activities incorporating familiar vocabulary and structures. Supplementary materials are introduced to enhance language use. Aspects of contemporary Spanish culture are introduced. Students must have completed a full year of Spanish I in order to take Spanish II. Students may be placed in Spanish II by placement testing.

603

## Spanish III

1 CR

Spanish III is intended to increase the quality and richness of your Spanish conversational skills and vocabulary set. While there is an emphasis on improving your overall fluency in Spanish, the course will feature cultural highlights to strengthen your understanding of Hispanic culture and grammar concepts. Students will be expected to discuss, research, and present on a variety of topics. This course will be primarily conducted in Spanish.

604

## Spanish III HONORS/Dual Enrollment\*

1 CR

Students continue to develop and increase their language acquisition in Spanish through the study of language structures in cultural and historical contexts. Students will be engaged in a study of language structures and vocabulary through reading, listening, speaking, and writing activities. Aspects of contemporary Spanish and Hispanic cultures are emphasized in this class.

605

## Spanish IV/Dual Enrollment\*

1 CR

Spanish IV provides students the opportunity to further develop, improve and refine their listening, speaking, reading and writing skills. Emphasis continues to be placed on aural skills with additional emphasis on reading and writing in the target language. Supplementary materials are implemented to enhance language use. Students experience multiple opportunities to demonstrate their proficiency in Spanish in different contexts. Aspects of contemporary Hispanic culture are emphasized through cultural readings, media, and class discussions.

606

## Spanish V/Dual Enrollment\*

1 CR

Students will study Spanish grammar and vocabulary and are expected to gain fluency in spoken and written Spanish as well as reading and listening comprehension proficiency. This is accomplished through oral and listening comprehension activities as well as through writing and reading assignments and exercises. Students are taught to speak with proper pronunciation and are exposed to reading, listening and cultural activities. Students are expected to speak only in Spanish, as the course is taught exclusively in Spanish

608

## French III HONORS

1 CR

French III will expand on the vocabulary and grammar skills learned in the first two years of French; emphasis will be placed on reading, writing, listening and speaking skills. No English will be spoken in this class. The students will read and discuss a short story and will study French history from prehistoric times to the French Revolution. Classes and discussion will be conducted in French.

622

## Latin I

1 CR

Latin I is designed to introduce students to the basics of classical Latin by studying the language's vocabulary, grammar, and syntax. Besides learning more about their own language and about language in general, students will also gain an introduction to Roman culture, history, and mythology. Students will learn both classical and ecclesiastical pronunciation.

623

## Latin II

1 CR

Latin II reviews and builds on the basic vocabulary, grammar, and syntax learned in Latin I. Students will continue their study of morphology, etymology, and the relationship between Latin, the Romance languages, and English. Continued study of Roman and Church culture, history, and classical mythology will extend students' knowledge of the classical and ecclesiastical worlds.

# Business Electives

703

## Business Dynamics

0.5 CR

This survey course introduces students to the business role as related to individuals, consumers, employees, and employers. Course content includes business operations, business management, business fundamentals, marketing, career planning, business law and ethics, finance, basic economics, technology and business communications. Students will learn the basics of investing. Stock market, bonds, mutual funds, real estate, risk management, and personal finance are also taught. (Grade 9)

710

## Business in a Global Society/Dual Enrollment\*

0.5 CR

Business in a Global Society is a fundamental exploration of all aspects of American business in the 21st century. Beginning with basic fundamental business/capitalist principles and working theory applied in practice, this college-level is designed to show students the exciting prospects for a career in the world of commerce. (Grades 11 and 12)

704

## Business Marketing

0.5 CR

Business Marketing offers students an overview of the marketing operations of a business. Students will learn about selling, promotion, buying, distribution, pricing, market research, product planning and entrepreneurship. In addition, other topics include: human relations and budget planning for marketing. Practical knowledge and skills gained from marketing classes will provide a solid foundation for students to excel in personal life, college, career, or business endeavors. (Grade 10, 11, 12)

705

## Accounting I

0.5 CR

Accounting is often called the language of business. Accounting will help every student succeed in business, even if the student chooses another major. This course stresses fundamental accounting concepts and exposes the student to computerized accounting systems. (Grades 11 and 12)

706

## Intro to Finance

0.5 CR

Students learn how economics and markets operate and how the United States economy is interconnected with the global economy. Additionally, they learn how to navigate financial decisions they must face and to make informed decisions relating budgeting, banking, credit, insurance, spending, taxes, as well as saving and investing. Development of financial literacy skills and understanding of economic principles will provide the basis for this course. Those interested in a career in business or simply for personal knowledge are encouraged to consider this course. (Grades 11 and 12)

707

## Intro to Supply Chain Management/Logistics

0.5 CR

This course explains what supply chain management is and how it can be a key component in organizational success. Modern businesses and organizations competing in a global business environment require excellence in supply chain management. The course explains how the term supply chain is used to represent all the individual firms, their personnel and the physical infrastructure required to create and transport products to customers. The student will learn how each interconnected member in a supply chain may move materials or information or money in response to customers' demands. (Grades 11 and 12)

# Science, Technology and Engineering Electives

731

## Pre-Engineering I/Intro to Engineering

.5 CR

The course will provide students with an exposure to four primary disciplines of engineering: chemical, civil, electrical and mechanical. Students will learn about each discipline through a combination of projects, research and presentations that complement their mathematical and scientific coursework. A primary focus of the Pre-Engineering course will be to further develop problem-solving skills with an attention to detail and analysis of the practicality of the results achieved. Professional aspects of engineering and education requirements of engineers will be explored.

732

## Pre-Engineering II

.5 CR

*Pre-requisite: Pre-Engineering I*

The course will provide students with in-depth exposure to four primary disciplines of engineering: chemical, civil, electrical and mechanical. Students will learn about each discipline through a combination of projects, research and presentations that complement their mathematical and scientific coursework. A primary focus of the Pre-Engineering course will be to further develop problem-solving skills with an attention to detail and analysis of the practicality of the results achieved. Professional aspects of engineering and educational requirements of engineers will be explored. This should not be chosen in place of an advanced science course.

735

## Intro to Computer Aided Drafting (CAD I)

0.5 CR

This class is designed to introduce students to the engineering profession. The course is an introduction to computer-aided design, utilizing Auto CAD, which provides the framework for students to develop computer-drafting expertise. Students learn to create, edit, manipulate, analyze and annotate 2D drawings. CAD is used in engineering, architecture, and manufacturing.

734

## Computer Aided Drafting II (CAD II)

0.5 CR

*Pre-requisite: Intro to Computer Aided Drafting (CAD I)*

CAD II builds on the technical drawing skills covered in technical Drawing. In the classroom, students learn both the scientific and non-scientific aspects of the engineering profession. The important non-scientific topics we cover include ethics, communication (written and oral), teamwork and planning. All these skills are used for Team Projects, which introduce students to “real world” engineering decision making from planning through design and testing of products. Field experiences and subsequent reports (written and oral), summarizing those experiences, are a required part of the course, since the field experience gives students a broader understanding of university engineering expectations as well as worksite experiences.

420

## Anatomy & Physiology I

.5 CR

Anatomy and Physiology is an elective science course designed to introduce students to the structural organization of the human body as well as the function of its major organ systems. It is suggested for students who intend to pursue a career in the field of health science.

421

## Physiology II

.5 CR

Physiology II is an *in-depth study* of the function of the major organ systems of the human body. Anatomy & Physiology with an overall grade of B+ or better is a pre-requisite for this course.

733

## Computer Science I

.5 CR

This course is geared to teach students how to use computers to solve problems. Students will learn how to write computer programs and make their own webpage.

734

## Computer Science II

.5 CR

*(Pre-requisite: Computer Science I)*

This course builds on the knowledge learned in Computer Science I; students will create complex graphical computer programs, such as games.

783

## Web Design

0.5 CR

This course combines elements of art, writing, and computer know-how to teach you the skills necessary to create a well-designed web site and publish content. Topics in the course include: an introduction to HTML and CSS, the basic languages of the World Wide Web; adding multimedia content and interactive features; streamlined site creation using popular tools; and an introduction to domains and web hosting. This course demystifies how the Internet works, and teaches skills which enable you to share with the world whatever matters to you, regardless of your ultimate profession

431

## Intro to Health Occupations

.5 CR

This course will explore the diversity of careers within the health care profession. Students will experience first hand knowledge from professionals in health care careers as well as explore college/university requirements and pathways for given career choices. In addition, current research in the field of medicine will be discussed as well as the biochemistry within a particular area.

416

## Wildlife Biology

.5 CR

The horticulture elective will be an important part of our school-wide sustainability plan. Students will help with composting, recycling, greenhouse use, and seasonal garden maintenance. The course will also cover topics in tree identification, plant parts and functions, plant growth and reproduction, soil science, plant pest and diseases, and plant propagation.

417

## Wildlife Biology

.5 CR

Wildlife Biology is an ecological and evolutionary tour through Kingdom Animalia with a focus on animals native to Pennsylvania. Through class discussions, field trips, lab-based activities, and experiments, students will learn fundamentals of animal development, behavior, life-history strategies, and evolutionary relationships. All major phyla will be studied including some lesser-known groups to allow students to appreciate the biological diversity of the animal kingdom. (All levels)

## Fine Arts

A quality Fine Arts program reflects the standards in which students create, perform and produce. At a minimum, such a curriculum encompasses four basic aspects, with the expectation that students will:

- Create and perform the arts
- Understand the role and importance of the arts in culture and history
- Perceive and respond to the qualities of the arts
- Value the major art works and artists of the discipline
- Make sound judgments about the arts and understand the bases on which those judgments rest (Arts Education Partnership Working Group 1993, p. 5)

805

## Instrumental Music Ensemble

0.5 CR

This course will prepare and rehearse an instrumental ensemble in various styles of music. The ensemble may serve as entertainment for athletic and student events, and provide liturgical music for mass. All instruments and abilities are welcome. (All levels)

809

## A' Cappella Choir

0.5 CR

This select group of musicians is open to all students by audition. Arrangements for an audition will be based on a schedule established by the director prior to the start of school or prior to the start of second semester. (All levels)

818

## Music Throughout the Ages

0.5 CR

This course will study the history of music around the world. It will examine what music means to different cultures and seeks to develop student appreciation for various styles and genres. (Grade 9)

801

## Intro to Art

0.5 CR

This course introduces students to various mediums and techniques in the visual arts. Both 2 dimensional and 3 dimensional mediums and techniques will be covered while following the basic principles and elements of art and design. Topics in art history and art appreciation will also be covered in this semester long course (Grade 9)

812

## Drawing I

0.5 CR

Designed for the beginning student, this course explores several drawing mediums including pen and ink, charcoal and pencil.

813

## Painting I

0.5 CR

Students expand their art experience in painting mediums including watercolors, washes, and acrylics. This course is designed for students who have completed introductory courses in art such as Studio I or II.

815

## Drawing & Painting II/III

0.5 CR

Students will expand on concepts learned in Drawing I and Painting I. A more in depth focus will be placed on composition, color theory, achieving accurate perspective and proportions, and painting techniques. Historical references will accompany each topic. Students planning to submit a college portfolio for a fine arts program will benefit from this course.

816

## Independent Studio Art

0.5 CR

This course is geared for students who require a portfolio for college acceptance or for scholarship presentations. Each student prepares a list of required art pieces and gradually assembles his/her portfolio. The course is designed for self-motivated students who enlist the guidance and direction of the art instructor. This course is limited to juniors and seniors.

817

## 3-Dimensional Art

0.5 CR

Students will learn to use various mediums to create 3 dimensional works. Paper, plaster, clay, and wire will be among the mediums used. Students will gain an understanding of the different styles and techniques used in sculpture. Historical references will accompany each medium and project throughout the course. (Grades 10, 11, 12)

741

## Video Imaging

0.5 CR

This course defines the basic skills used to succeed in multi media. It begins with an understanding of film history, starting with the silent film and progressing to the present. Students will use video cameras, learning iMovie. They will apply storyboards to create short films, and learn the basics of stop animation. A final project will involve a self- expressive short film. (Grades 9 and 10)

210

## Theatre

0.5 CR

In this course students will obtain a general knowledge of the history of theatre as well as terminology and practical knowledge related to theatre productions. Students will read and watch select plays that follow the historical timeline that we study beginning with the ancient Greeks, and ending with contemporary theatre. Students will also gain experience writing scripts, memorizing lines, improvising, and acting in front of the class. They will also be exposed to all aspects of technical production such as, stage and costume design.

# Social Science & Pre-Career Electives

901

## Child and Family Studies

0.5 CR

The student will have the opportunity to learn about individuals that make up families starting with conception and going through old age - how they develop socially, physically, emotionally and intellectually. The course offers a focus of experimental learning inside and outside the classroom that will allow students to observe and be involved with children and families.

571

## Intro to Psychology

0.5 CR

This course is an introduction to the study of psychology. The primary scope of the course will include the following: principles of learning, the study of human behavior, memory, personality development, the brain and its functions, emotions, mental health and social problems and lifespan development. Emphasis will also be placed on recent developments in psychology and current events relating to the course of study.

572

## Intro to Sociology

0.5 CR

Students will learn the basics of sociology and study human social life, personalities, relationships, behaviors, cultures, and more. Students will also learn about current events pertaining to sociology. This course includes two required field trips.

580

## Intro to Legal Studies

.5 CR

A semester long course that fulfills a half credit of general Social Studies, Legal Studies will introduce students to the legal system and topics which include, but are not limited to: the Criminal justice System, Law Enforcement and the Courtroom. Throughout the course students will explore the nature of crime and social control, the various levels of law enforcement and the history and structure of the courts. Guest speakers will provide students with real world testimony of various careers within the legal system. The mock trial unit will instill hands on

experience with courtroom practices and procedures. Students will learn invaluable cross-curricular skills such as collaboration, analyzing academic text and the ability to construct legally based discourse and practical application of the law.

220

## Creative Writing

.5 CR

This course will engage students in the art of creative writing. The course will teach the writing of various creative facets, such as fictional narrative, short stories, poetry, and more. Additionally, students will read various creative works in order to glean an understanding of the field of creative writing. Students are expected to publish at least one piece of creative writing from this course for an authentic audience. One evening field trip will be required.

222

## Media Studies

.5 CR

Students will study media communications and the influence of media on our lives. Students will think critically and engage in research about the relationship of media to culture and society. Additionally, students will apply their acquired knowledge to understand the depth of media and create their own media using graphic design. One field trip is included in this course.

223

## Communications

.5 CR

This course focuses on the study of print communications and journalism. Students will learn how to write with an emphasis in journalism and will compose various pieces of written communications with authentic audiences. For example, students will participate in creating a school newspaper and will also create the 2016-2017 Saint Joseph's Catholic Academy Yearbook. Students are required to attend at least two after-school events for photojournalism.

811

## Nutrition and Wellness

0.5 CR

This one-semester elective course provides students with an overview of good nutrition principles that are necessary for physical and mental wellness, and a long, healthy life. Instructional materials include discussions of digestion, basic nutrients, weight management, sports and fitness, and life-span nutrition. This course emphasizes an understanding of today's food and eating trends and gives students the capacity to intelligently evaluate all available sources of nutrition information and make informed decisions.

813

## Intro to Athletic Training (Pre-requisite: Health 9 or 10)

.5 CR

This course will teach students to recognize, prevent, and rehabilitate sports-related injuries. Students will study musculoskeletal anatomy, pathology of sports injuries, basic taping and wrapping, and related professions within the field of sports medicine.

# General Studies

960

## Driver Education

0.25 CR

Classroom instruction deals with the rules and regulations of driving. Safe driving practices and the responsibilities of the individual when operating a vehicle will also be discussed. (Grade 10)

415

## Health

0.25 CR

In this course, students explore a wide variety of topics that relate to their health. The purpose of this class will be to help familiarize students with the many different variables that can affect their lives and help them learn how to use their decision making skills in order to make healthy choices. Topics include making healthy decisions, mental health, social health, nutrition, human development, and preventing disease. (Grade 10)

417

## Personal Wellness

0.25 CR

This course is designed to help students understand the importance of exercise and healthy living habits for their lifetime. Students will participate in a wide variety of exercise activities. This course will enhance students' understanding of their fitness needs and guide them in making wise decisions to improve their health and wellness. Students will also analyze and compare healthy food choices, the various ways of meeting daily dietary standards, and the health risks, fitness levels, nutritional habits, lifestyle choices, and attitudes that contribute toward wellness. A personal wellness plan will be developed and implemented by the student during this yearlong class. Topics will also include substance abuse and community health and safety. (Grade 11 or 12)

902

## Pre-College Seminar

0.25 CR

Students will prepare for college admission testing (SATs and ACTs); evaluate test scores and design improvement plans where appropriate; They will also access and navigate a variety of search tools for college programs and majors, and be introduced to the college application and financial aid processes. (Grade 11)