# **Department of Theology and Campus Ministry**

The goals of the Theology Department are to:

- 1) Develop an understanding of the basic teachings of the Gospels, the Holy Trinity, and the role of Jesus Christ and the Church.
- 2) Provide the environment for a student to accept the grace to establish a vision of morality, both in a personal and social dimension, based on Gospel teaching and values.
- 3) Provide opportunities for a student to examine his or her own faith journey and come to a deeper appreciation of the relevance of the Gospel to everyday life.

9th Grade Course (Fall): The Old Testament

Course Number: 101

Credits: 0.5

### **Course Description:**

This course leads students toward a deeper understanding of the Old Testament and the history of our salvation presented within it. The students begin by examining the nature of Scripture as inspired by Revelation and by developing the basic interpretive and exegetical skills necessary to navigate Scripture. The course then proceeds with a systematic study of the 46 books of the Old Testament, introducing students to the early leaders of Israel, the judges and kings, and the prophets.

**Prerequisite(s):** None

Difference between college placement and honors: NA

9th Grade Course (Spring): The New Testament

Course Number: 102

Credits: 0.5

#### **Course Description:**

#### The New Testament

This course builds on the foundation created in Theology 101 ("The Old Testament") by examining the relationship between the Old Testament and the New, and how the covenants of the former are fulfilled in the New Covenant that Christ establishes in the latter. This is done through an exploration of 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. The course then proceeds to study the Acts of the Apostles, the Epistles, the Book of Revelation, and later first-century letters.

**Prerequisite(s):** None

10th Grade Course (Fall): Who is Jesus Christ?

Course Number: 201

Credits: 0.5

#### **Course Description:**

This course leads students toward a deeper understanding of divine Revelation, the Trinity, and the Incarnation. The course begins by considering faith and reason as "two wings of the soul" (to quote Pope St. John Paul II) and then by establishing foundational skills in reason and philosophy, including the use of syllogisms and the identification of fallacies. These skills are used to investigate the reliability of the Gospels and how we ought to respond to Christ's divine claim therein. Students use the precise terminology of the first several Councils to communicate our understanding of the mystery of the Trinity and the Incarnation. The course concludes with a study of the Blessed Virgin Mary, and how the Marian dogmas reveal and protect what we believe about Christ. As Joseph Cardinal Ratzinger (Pope Emeritus Benedict XVI) has written, as Christians, "our departure point is a person, not a program."

Prerequisite(s): None

Difference between college placement and honors: NA

10th Grade Course (Spring): The Church

Course Number: 202

Credits: 0.5

#### **Course Description:**

This course leads students toward a deeper understanding of the Catholic Church established by Jesus Christ. The course examines the "one, holy, catholic, and apostolic" Church in its structure, teaching authority, and early history. The course then considers the varied roles of clergy, consecrated religious, and laity. The course concludes with a practical approach to ecumenism and inter-religious dialogue, including a survey of the doctrinal differences between Catholics and other Christian ecclesial groups and the major tenets of several non-Christian religions. This part of the course has the intention of enabling students to "recognize, preserve, and promote" the good found in other faiths while maintaining the Church's identity as the Gate of Salvation.

Prerequisite(s): None

Difference between college placement and honors: NA

11th Grade Course (Fall): Christian Morality

Course Number: 301

Credits: 0.5

#### **Course Description:**

This course leads students toward a deeper understanding of God's Law as revealed to us through human reason and Divine Revelation. The course begins by illustrating the problems with moral relativism before laying the foundation of moral theology, including Original Sin, the types and effects of sin, and the parts of the moral act. The rest of the course is then devoted to considering a variety of contemporary moral issues in the light of Christ's teaching and the Magisterium of the Church. The emphasis of the course is a practical discussion of how one might move beyond a servile "bare minimum" morality and into a relationship with

God and others that is founded on sanctifying grace. In other words, this course emphasizes how the Christian can grow in virtue, not merely avoid vice.

**Prerequisite(s):** None

Difference between college placement and honors: NA

11th Grade Course (Spring): Catholic Social Teaching

Course Number: 302

Credits: 0.5

## **Course Description:**

This course builds on the foundation laid in Theology 301 ("Christian Morality") with a focus on the social teaching of the Church. Beginning with fundamental questions about the composition and purpose of society, the course examines the key contributions of the papal magisterium, from Leo XIII's *Rerum Novarum* through the present. The course then studies the essential themes and principles of Catholic Social Teaching and how they address the significant issues of the age.

Prerequisite(s): None

Difference between college placement and honors: NA

12th Grade Course (Fall): The Sacraments

Course Number: 401

Credits: 0.5

#### **Course Description:**

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 terms and concepts necessary to study the Sacraments. The seven Sacraments are then considered in their appropriate groupings: the Sacraments of Initiation, with a special emphasis on the Eucharist as "source and summit" of the Christian life; the Sacraments of Healing; and the Sacraments at the Service of Communion. A recurring theme of the course is the importance of the Sacraments both for the life of the Church and the life of the Christian as well as the intimate relationship between Sacrament and covenant.

Prerequisite(s): None

Difference between college placement and honors: NA

12th Grade Course (Spring): The Paschal Mystery

Course Number: 402

Credits: 0.5

#### **Course Description:**

This course leads students toward a deeper understanding of the person of Christ and his redeeming work. Beginning with Original Sin and the fall from grace, the course tells the story of our salvation through Christ's suffering, death, Resurrection, and Ascension. This is done first by an examination of the covenantal structure and messianic prophecies of the Old Testament. It then considers how those prophecies were fulfilled in Christ's Incarnation and ministry, and how the covenants are fulfilled in the New Covenant of Christ's Blood that was

instituted within the events of the Paschal Triduum. Finally, the course explores our response to redemption through lives of prayer and discipleship.

Prerequisite(s): None

Difference between college placement and honors: NA

## **Department of English**

The goals of the English Department are:

- 1) equal emphasis on language skills, writing and literature as well as on public speaking throughout each course
- 2) development of information literacy: acquiring and processing information
- 3) application of technology to writing and research projects.

9th Grade Course: Literature and Composition

Course Number: 201

Credits: 1

#### **Course Description:**

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.

Prerequisite(s): None

Difference between college placement and honors: NA

9th Grade Course: Honors English Literature and Composition

Course Number: 202

Credits: 1

#### **Course Description:**

Honors English 9 is designed to provide a challenging and enriching experience for students who exhibit advanced proficiency in language arts. This course explores various literary genres, including fiction, non-fiction, poetry, and drama, with an emphasis on critical analysis, interpretation, and synthesis of complex texts. Students will engage in close reading, literary discussions, and written reflections to deepen their understanding of thematic concepts, character development, plot structure, and literary techniques.

Through a comprehensive study of canonical and contemporary works, students will develop their skills in reading comprehension, literary analysis, and effective communication. They will explore the cultural and historical contexts of literature and examine how diverse perspectives shape meaning and interpretation. Additionally, students will hone their writing abilities through the composition of analytical essays, creative narratives, and research-based projects, focusing on clarity, coherence, and sophistication of expression.

<u>Prerequisite(s):</u> Recommendation by School Counselor and/or previous teacher <u>Difference between college placement and honors:</u> Critical thought and research based

10th Grade Course: World Literature

Course Number: 205

Credits: 1

#### **Course Description:**

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. World Literature is focused on introducing learners to literature and nonfiction, reading and writing, analysis and argument, and is both challenging and nurturing; a course full of big ideas, thought-provoking texts. The course organization focuses on these essential questions: What does "identity" mean? How is one's identity formed? How do personal experiences affect our identity? To what extent does school emphasize conformity at the expense of individuality? Students practice the writing process in activities designed to assist them in finding their own voice in writing and in developing a mature style.

<u>Prerequisite(s):</u> Successful Completion of Literature and Composition

Difference between college placement and honors: NA

10th Grade Course: World Literature Honors

Course Number: 206

Credits: 1

#### **Course Description:**

Honors World Literature is designed for sophomore 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 these essential questions: What does "identity" mean? How is one's identity formed? How do personal experiences affect our identity? To what extent does school emphasize conformity at the expense of individuality? 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.

<u>Prerequisite(s):</u> Prospective World Literature Honors students must complete at least two (2) of the following criteria: 1. Students must complete a timed writing sample to be evaluated by the English department and score an average 87% (B+) or higher as graded by the English department. 2. Previous year English course grade must be a minimum of 87 (B+) or higher, 3. Teacher Recommendation.

<u>Difference between college placement and honors:</u> The differences between the college placement and honors courses include, but are not limited to: rigor, pacing, depth of analysis, texts, and independent work.

11th Grade Course: American Literature and Composition

Course Number: 203

Credits: 1

## **Course Description:**

In 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 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 APA style. Additional skill development includes vocabulary, grammar review, note-taking, small- and large-group work, and both formal and informal oral presentations. Prerequisite(s): None

<u>Differences between American Literature and Composition and AP Language and Composition</u> include, but are not limited to: rigor, pacing, depth of analysis, texts, and independent work.

11th/12th Grade Course (Offered in alternating years)

Course Title: AP Language and Composition

**Course Number: 216** 

Credits: 1

#### **Course Description:**

Advanced Placement English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing. The rhetoric analysis of nonfiction texts, and decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements and their efforts in nonfiction texts-including images as forms of text-from a race of disciplines and historical periods. Excellent reading, writing, and public speaking skills are required. Summer reading assignments will be given, from which a paper will be submitted at the beginning of the school year. **Students must take the AP exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.** 

<u>Prerequisite(s):</u> Prospective AP English Language and Composition students must meet at least three (3) of the following criteria: 1. Students must complete a timed writing sample to be evaluated by the English department and Prospective AP students must score an average of 87% (B+) or higher as graded by the English department. 2. Previous year English course grade must be a minimum of 87% (B+) or higher, 3. Teacher Recommendation, 4. College Board predictor.

<u>Differences between American Literature and Composition and AP Language and Composition</u> include, but are not limited to: rigor, pacing, depth of analysis, texts, and independent work.

12th Grade Course

Course Title: Contemporary Literature and Composition

Course Number: 207

Credits: 1

**Course Description:** 

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.

Prerequisite(s): None

<u>Differences between ContemporaryLiterature and Composition and AP Literature and Composition</u> include, but are not limited to: rigor, pacing, depth of analysis, texts, and independent work.

11th/12th Grade Course (Offered in alternating years) Course Title: AP English Literature and Composition

Course Number: 208

Credits: 1

#### **Course Description:**

Advanced Placement English Literature & Composition provides talented high-school juniors and 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 and 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 must take the AP exam at the end of the course and pay the AP exam fee in the beginning of the school year in order to sit for the exam.** 

<u>Prerequisite(s):</u> Prospective AP English Language and Composition students must meet at least three (3) of the following criteria: 1. Students must complete a timed writing sample to be evaluated by the English department and Prospective AP students must score an average of 87% (B+) or higher as graded by the English department. 2. Previous year English course grade must be a minimum of 87% (B+) or higher, 3. Teacher Recommendation, and 4. College Board predictor.

<u>Differences between Contemporary Literature and Composition and AP Literature and Composition</u> include, but are not limited to the following: rigor, pacing, depth of analysis, texts, and independent work.

# **Department of Mathematics**

The goals of the Mathematics Department include:

- 1) to place strong emphasis on the essential algebraic, numeric, and geometric skills with problem-solving, investigative, and explanatory work
- 2) to provide a solid math foundation for all students
- 3) to challenge those students who are mathematically talented.

9th Grade Course:

Course Title: Algebra I

Course Number: 301

Credits: 1

## **Course Description:**

This course emphasizes the study of expressions, equations and inequalities, linear and quadratic functions and relations, graphing, linear systems of equations and inequalities, polynomials and factoring, exponents and radicals. Applications are presented throughout the course. Scientific calculators are used when appropriate for instruction and assessment.

**Prerequisite(s):** Pre-Algebra

Difference between college placement and honors: NA

9th, 10th or 11th Grade Course

Course Title: Algebra II Course Number: 302

Credits: 1

#### **Course Description:**

This course extends the concepts of Algebra I and advances skills in algebraic operations. Additionally, quadratic systems, absolute value functions, quadratic and polynomial functions, exponential and radical functions, inverse functions, and complex numbers are explored. Graphing calculators **and other mathematical technologies** are used when appropriate for instruction and assessment.

<u>Prerequisite(s):</u> Algebra I and Geometry [both required in middle school if beginning Algebra II in 9<sup>th</sup> grade] <u>Difference between college placement and honors:</u> NA

9th, 10th, or 11th Grade Course: Course Title: Algebra II Honors

Course Number: 310

Credits: 1

#### **Course Description:**

This course extends and deepens the topics of the standard course. Additionally, probability and statistics and periodic functions and trigonometry are explored. Graphing calculators and other mathematical technologies are used when appropriate for instruction and assessment.

**<u>Prerequisite(s):</u>** Algebra I and Geometry Honors. [both required in middle school if beginning Algebra II in 9<sup>th</sup> grade]

<u>Difference between college placement and honors:</u> Algebra II Honors provides a more in-depth study of the topics of Algebra II standard course. Additionally, rational functions, matrices, permutations, and combinations are explored.

9th or 10th Grade Course: Course Title: Geometry Course Number: 303

#### Credits: 1

### **Course Description:**

This course develops an understanding of geometric concepts and uses logical reasoning skills. The topics to be covered include properties of angles, lines, polygons, and congruence, similarity, coordinate geometry, justification and proof, right triangles, two-dimensional and three-dimensional shapes and figures. Problems often require prerequisite algebra skills including factoring quadratic equations and systems of equations. Scientific calculators are used when appropriate for instruction and assessment.

<u>Prerequisite(s):</u> Algebra I [required in 8<sup>th</sup> grade if taking Geometry in 9<sup>th</sup> grade]

Difference between college placement and honors: NA

9th or 10th Grade Course:

**Course Title: Geometry Honors** 

Course Number: 309

Credits: 1

#### **Course Description:**

This course extends and provides a more in-depth study of the geometric concepts and logical reasoning skills of the Geometry course. The topics to be covered include properties of angles, lines, polygons and congruence, similarity, coordinate geometry, justification and proof, right triangles, vectors, circles, two-dimensional and three-dimensional shapes and figures. There is a substantial emphasis on independent proof writing. Problems often require prerequisite algebra skills including: factoring quadratic equations, systems of equations, and literal equations. Scientific calculators are used when appropriate for instruction and assessment. Prerequisite(s): Algebra I (required in 8th grade if taking Geometry Honors in 9th grade)

Difference between college placement and honors: Geometry Honors provides a more in-depth study of the geometric concepts and logical reasoning skills of the Geometry college prep course, with an increased emphasis on proof writing..

9th, 10th, 11th, or 12th Grade Course:

Course Title: PreCalculus with Trigonometry Honors

Course Number: 304

Credits: 1

#### **Course Description:**

This course provides students with an honors-level study of trigonometry and includes the twelve basic functions, LINEAR systems and matrices, analytic geometry in two and three dimensions, and discrete mathematics to prepare students for calculus. Applications and modeling are emphasized throughout the course of study. Graphing calculators **and other mathematical technologies** are used when appropriate for instruction and assessment.

**Prerequisite(s):** Geometry and Algebra II Honors with grade of B or higher *or* College Algebra with Trigonometry

Difference between college placement and honors: NA

#### 10th, 11th, or 12th Grade Course:

**Course Title: AP Calculus AB** 

**Course Number: 311** 

Credits: 1

## **Course Description:**

The AP Calculus AB course encompasses material that would normally be covered in the first semester of a 1-year college calculus course. Topics include: Review of precalculus concepts, limits and continuity, derivatives and their applications, the definite integral and its applications, differential equations, and mathematical modeling. Graphing calculators are used when appropriate for instruction and assessment. This course prepares students to take the AP Calculus AB test. Students must take the AP Calculus AB exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.

<u>Prerequisite(s)</u>: Two of the following are required: Final grade B+(87%) or higher in the Precalculus with Trigonometry honors course; teacher recommendation from the math department; College Board AP Indicator of Success (60% or better).

#### Difference between Intro to Calculus I Honors, AP Calculus AB, and Calculus II:

Intro to Calculus 1 Honors provides an introduction to Calculus that will ease the transition to college calculus. It does not cover all the material required to enable students to take the AP Calculus AB test. The material covered is about what would be covered in the first semester of a college level course on calculus.

The AP Calculus AB course is ideal for seniors who would like exposure to college level calculus with the opportunity to receive college credit by taking the AP Calculus AB test. The material covered is somewhat more than what would be covered in the first semester of a college level course on calculus, and in more depth than what is covered in Intro to Calculus I Honors. The amount of credit received depends on the college and on the grade the student receives on the AP test. For example, students who receive a score of 4 or 5 in the AP Calculus AB test are eligible to receive 4 credits at Penn State for MATH 140, the first semester calculus course. AP Calculus AB can also be taken by exceptionally well-prepared underclass students, though younger students may benefit from the slower pace of Intro to Calculus I Honors. Underclass students may take either Intro to Calculus I Honors or AP Calculus AB to prepare to take Calculus II Honors.

The Calculus II course is the culmination of the calculus curriculum at SJCA and prepares students to take the AP Calculus BC test. The material is what would be covered in the second semester of a college level course on calculus. The amount of credit received depends on the college and on the grade the student receives on the AP test. For example, students who receive a score of 4 or 5 in the AP Calculus BC test are eligible to receive 4 credits at Penn State for MATH 141, the second semester calculus course.

#### 11th or 12th Grade Course:

Course Title: Intro to Calculus 1 Honors/Optional Dual Enrollment\*

Course Number: 306

Credits: 1

## **Course Description:**

Intro to Calculus 1 Honors gives students an introduction to the main topics of calculus to ease the transition to college calculus. Underclass students who take this course will have sufficient preparation from it to take AP Calculus BC the following year. Topics include: Review of precalculus concepts, limits and continuity, derivatives and their applications, the definite integral and its applications, and mathematical modeling. Graphing calculators are used when appropriate for instruction and assessment. Students can earn college credit from Mt. Aloysius. <a href="Perequisite(s)">Perequisite(s)</a> One of the following is required: Final grade of B (80%) or higher in the Precalculus with Trigonometry course; teacher recommendation from the math department.

#### Difference between Intro to Calculus I Honors, AP Calculus AB, and AP Calculus BC: See description above

11th or 12th Grade Course: Course Title: Calculus II Course Number: 312

Credits: 1

#### **Course Description:**

The Calculus II course encompasses material that would normally be covered in the second semester of a 1-year college calculus course. Topics include: Review of calculus concepts, differential equations and applications, applications of the integral, advanced integration techniques and l'Hopital's rule, infinite series and applications; Conics, parametric equations, and polar coordinates. Graphing calculators are used when appropriate for instruction.

Prerequisite(s): Must have taken either Intro to Calculus I or AP Calculus AB and one of the following: Final grade of B (80%) or higher in Intro to Calculus I or AP Calculus, or math teacher recommendation.

Difference between Intro to Calculus I Honors, AP Calculus AB, and Calculus II: See description above

11th and 12th Grade Course: College Algebra with Trigonometry

Course Number: 305

Credits: 1

#### **Course Description:**

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 PreCalculus or college-level algebra courses. Graphing calculators are used regularly for instruction and assessment.

Prerequisite(s): Geometry and Algebra II

Difference between college placement and honors: NA

12th Grade Course: Statistics and Probability/Optional Dual Enrollment\*

Course Number: 308

Credits: 1

#### **Course Description:**

This course is an introduction to the fundamental topics of probability and statistics, including the 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, statistical inference, estimating population parameters, and testing hypotheses. Students who successfully earn a C letter grade or higher can receive college credits through Mt. Aloysius.

<u>Prerequisite(s):</u> Seniors who have completed Algebra II <u>Difference between college placement and honors:</u> NA

## **Department of Science**

The goals of the Department of Science are to:

- 1) Provide an education in science that will allow each student to become scientifically literate
- 2) Provide an education in the life and physical sciences.
- 3) Have a working knowledge of the major concepts of science
- 4) Maximize hands-on laboratory experiences
- 5) Develop information literacy acquiring and processing information in all courses.

9th Grade Course: Biology I

Course Number: 401

Credits: 1

### **Course Description:**

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. This course will also emphasize the harmony of faith and reason. Prerequisite(s): None

Difference between college placement and honors: NA

9th Grade Course: Biology I Honors

Course Number: 402

Credits: 1

#### **Course Description:**

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. 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. This course will also emphasize the harmony of faith and reason.

**Prerequisite(s):** Approval of Science Department

<u>Difference between college placement and honors:</u> Biology I Honors involves additional laboratories, independent reading, higher-level critical thinking, reasoning, and problem-solving assessments.

10th Grade Course: Chemistry I

Course Number: 403

Credits: 1

#### **Course Description:**

Chemistry I is the study of matter and the change it undergoes through the laws and theories that govern this behavior. Building from atoms, the students will build a strong foundation in the principles of chemistry. Laboratory experiments are designed to emphasize the scientific method of investigation as well as to develop good laboratory techniques. Physical and chemical changes, scientific notation and measurements, atomic theory, electrons, naming compounds, molecular geometry, and chemical reactions are some of the topics covered.

**Prerequisite(s):** Biology, Algebra I

<u>Difference between college placement and honors:</u> Chemistry I has less math and less content in comparison to Chemistry I Honors. Grades are based on exams, quizzes, and multiple effort-based homework assignments.

10th Grade Course: Chemistry I Honors

Course Number: 404

Credits: 1

#### **Course Description:**

Chemistry I Honors places an emphasis on the mathematical basis of chemical concepts. Students will study the laws and theories of chemistry in detail. 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. Physical and chemical changes, scientific notation and measurements, atomic theory, electrons, naming compounds, molecular geometry, and chemical reactions are some of the topics covered.

<u>Prerequisite(s):</u> Biology, Algebra I, Geometry

Co-requisites(s): Algebra II

<u>Difference between college placement and honors:</u> Honors chemistry is more math-based with more in-depth content in certain areas. Students in this course should have completed Algebra I and Geometry, and be recommended by the math department for entrance into honors chemistry. Grading is mainly based on exams, quizzes, and labs with only a few homework grades. Chemistry I has less math and less content. Grades are based on exams, quizzes, and multiple effort-based homework assignments.

11th Grade Course: Physics I

Course Number: 405

Credits: 1

#### **Course Description:**

Physics I is an algebra-based course designed to teach classical mechanics. The focus of this course is describing motion and the behavior of everyday physical phenomena such as acceleration and motion, forces, Newton's Laws, conservation of energy and momentum, nuclear physics, wave behavior, sound and light. Lab activities focus on pattern recognition

and generating algebraic relationships to describe physical laws.

<u>Prerequisite(s):</u> Algebra I and Geometry <u>Co-requisites(s):</u> Algebra II or College Algebra

**Difference between college placement and honors:** The college placement physics class is designed to challenge students to explain physical science on a more conceptual level; two dimensional motion, trigonometry and advanced algebra solving techniques are not part of the college preparatory course.. Students will need to be able to select and solve simple algebraic relationships that describe phenomena they observe. Grading is split evenly between homework completion, class participation, lab activities, and summative quizzes.

11th Grade Course Title: Physics I Honors

Course Number: 406

Credits: 1

### **Course Description:**

Physics I Honors takes an algebraic and conceptual approach to explaining the fundamentals of classical physics. Similar to Physics I, this course explores classical mechanics. Topics covered include acceleration and motion, forces, Newton's Laws, conservation of energy and momentum, nuclear physics, wave behavior, sound, and light. The concepts are extended and applied to numerous word problems of varying complexity. Students are challenged to complete multiple application-based laboratory experiments or projects. Grading is more heavily weighted towards exams and quizzes, along with a mix of graded homework problem sets and laboratory experiments.

Prerequisite(s): Algebra II and Geometry

Co-requisites(s): Pre-Calculus or College Algebra with Trigonometry

Difference between college placement and honors: This course utilizes more advanced mathematics techniques, such as trigonometric relations and 2-D motion concepts. Students enrolled in this course are securing the pacing and mathematical foundations to enroll in the Calculus based AP/ CHS Physics during their 12th grade year. This course also differs in the length, depth, and/or complexity per topic from college prep physics. This course prepares students for more rigorous introductory college-level physics courses such as those regularly required for degrees in engineering, science or some pre-med fields.

11th or 12th Grade Course: AP Chemistry

Course Number: 422

Credits: 1

#### **Course Description:**

AP Chemistry I is a course designed for the seriously committed science student. General chemistry topics are reviewed. 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. This course can also be taken for college credit through St. Francis University. Students will also compete in the Chemistry Olympiad in the spring semester.

Prerequisite(s): Biology I or Biology I Honors, Chemistry I Honors, Algebra I, and Algebra II

**Co-requisites(s):** Physics I Honors, Pre-Calculus

<u>Difference between placement and honors:</u> If you read the chemistry topics, the difference is stated. Also, this is equivalent to the second semester chemistry for many traditional colleges.

11th or 12th Grade Course: AP Biology: Optional Dual Enrollment

Course Number: 423

Credits: 1

## **Course Description:**

AP Biology 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 equip students for college-level biology or earn college-level credit upon completion. This course will also emphasize the harmony of faith and reason. Students have the option to earn 4 credits from Saint Francis University (BIOL 111: Biology I; see <a href="https://www.francis.edu/College-in-High-School/">https://www.francis.edu/College-in-High-School/</a>) and to take the Advanced Placement Biology Exam. Students must take the AP exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.

**Prerequisite(s):** Biology I or equivalent and Chemistry I

Difference between honors and AP: NA

11th or 12th Grade Course: Anatomy and Physiology I

Course Number: 420

Credits: 1.0

#### **Course Description:**

Human Anatomy and Physiology I is a science course designed to introduce students to the structural organization of the human body as well as the function of its major organ systems. This course has two primary objectives. The first is for every student to obtain a basic knowledge and understanding of human anatomy and physiology. The second is to apply this knowledge to problems observed in real life clinical situations, such as, cardiac problems, athletic injuries, hypertension, renal failure, and endocrine imbalances. The ultimate goal of both objectives is to obtain a practical understanding of human anatomy and physiology that can be built upon in future studies.

Prerequisite(s): Biology I or Biology I Honors and Chemistry I or Chemistry I Honors

Co-requisites(s): NA

12th Grade Course: AP Physics/College in High School Physics/ Optional Dual Enrollment\*

Course Number: 414

Credits: 1.4

#### **Course Description:**

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 Saint Francis University. Students must take the AP exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.

<u>Prerequisite(s):</u> Physics I Honors, Pre-Calculus or prior course in Calculus

<u>Co-requisites(s):</u> Calculus I or Calculus II

<u>Difference between college placement and honors:</u> This course is the first semester physics for scientists and engineers through the University of Pittsburgh. This is a calculus-based course and may only be taken by students who have completed or who are currently enrolled in Calculus.

12th Grade Course: Energy and Environmental Science

Course Number: 413

Credits: 1

#### **Course Description:**

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.

<u>Prerequisite(s):</u> Biology I, Chemistry I, and Physics. <u>Difference between college placement and honors:</u> NA

# **Department of Social Studies**

The goals of the Social Studies Department include:

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

9th Grade Course: Introduction to the Humanities

Course Number: 521

Credits: 1.0

#### **Course Description:**

This course will introduce students to necessary skill sets used in the Social Sciences through a survey of early civilizations, geography and the development of Western government and culture. Skills such as periodization, synthesis, contextualization and chronological reasoning will be developed through the exploration of early civilizations, political systems, cultural interactions, world religions, and nation-building. Students will synthesize historical information through research, class discussion, and analysis of primary and secondary sources.

Prerequisite(s): None

Difference between college placement and honors: NA

10th Grade Course: American History

Course Number: 500

Credits: 1.0

#### **Course Description:**

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.

**Prerequisite(s):** None

11th Grade Course: AP United States History/Optional Dual Enrollment\*

Course Number: 510

Credits: 1.0

## **Course Description:**

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. **Students must take the AP exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.** Students can earn college credit at Mt. Aloysius.

<u>Prerequisite(s):</u> Must have a writing assessment completed in 10th grade, teacher recommendation, and minimal grade of a B from current history class.

<u>Difference between college placement and Advanced Placement:</u> College level text and source material, faster pace with additional depth and preparation for AP United States History Exam.

11th Grade Course: World History

Course Number: 516

Credits: 1

## **Course Description:**

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' understanding of other cultures.

**Prerequisite(s):** None

Difference between college placement and honors: NA

11th Grade Course: AP European History

Course Number: 507

Credits: 1.0

#### **Course Description:**

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. Students must take the AP exam at the end of the course and pay the AP exam fee at the beginning of the school year in order to sit for the exam.

<u>Prerequisite(s):</u> Must have a writing assessment completed in 10th grade, teacher recommendation, and minimal grade of a B from current history class.

<u>Difference between college placement and Advanced Placement:</u> College level text and source material, faster pace with additional depth and preparation for AP European History Exam.

12th Grade Course: Economics and Global Issues

**Course Number: 522** 

Credits: 1.0

#### **Course Description:**

This course, required for all seniors, includes a semester-long introduction to Economics and a semester of Government and Global Issues. Economics units include: Personal Finance, Microeconomics and Macroeconomics. Students will learn budgeting, the importance of credit scores, interest rates, insurance and additional aspects of personal finance. Additionally, they will be introduced to economic systems, including a focus on American Free Enterprise, the history of American banking, money supply and finally research current economic conditions in our country. In semester two, students will explore social, political and economic issues facing citizens of Pennsylvania, the United States and citizens of the global community. Students will identify one issue that they will focus on for a semester-long research project and present this project in the final weeks of the school year as a final grade.

Prerequisite(s): None

Difference between college placement and honors: NA

## **World Language Department**

The goals of the World Language Department include:

- 1)Compulsory **three** (**two?**) years at the high school level to study a world language.
- 2) 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 is being considered.

9th, 10th, 11th, or 12th Grade Course: American Sign Language I

Course Number: World Language

Credits: 1

#### **Course Description**

American Sign Language I will introduce you to vocabulary and simple sentences, so that you can start communicating right away. Importantly, you will explore Deaf culture: social beliefs, traditions, history, values and communities influenced by deafness. The second semester will introduce you to more of this language and its grammatical structures.

**Prerequisite(s):** None

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: American Sign Language II

Course Number: World Language

Credits: 1

## **Course Description**

American Sign Language II (1.0 credit) In this course, students will build on the skills they learned in American Sign Language (ASL) I and explore the long and rich history of Deaf culture and language. They will expand their knowledge of the language as well as their understanding of the world in which it is frequently used. Students will grow their sign vocabulary and improve their ability to interact using facial expressions and body language. They will also learn current trends in technology within ASL as well as potential education and career opportunities.

**Prerequisite:** American Sign I

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: French I

Course Number: World Language

Credits: 1

#### **Course Description**

French I is designed to focus on successful communication through speaking, writing, reading, and listening, and provides a thorough grounding in aspects of culture. Activities blend different forms of communication and culture to ensure that students meet all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multimedia presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** NA

Difference between college placement and honors: NA

10th, 11th, or 12th Grade Course: French II

Course Number: World Language

Credits: 1

#### **Course Description**

French II is designed to focus on successful communication through speaking, writing, reading, and listening, and provides a thorough grounding in aspects of culture. Activities blend different forms of communication and culture to ensure that students meet all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions,

multimedia presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** French I

Difference between college placement and honors: NA

11th, or 12th Grade Course: French III Course Number: World Language

Credits: 1

## **Course Description**

French III In this course, students will deepen their understanding of French by focusing on the three modes of communication: Interpretive, interpersonal, and presentational. Each unit consists of a variety of activities which teach students how to understand more difficult written and spoken passages, communicate with others through informal speaking and writing interactions, and express their thoughts and opinions in more formal spoken and written contexts. Students will be actively engaged in their own language learning; use correct vocabulary terms and phrases naturally; incorporate a wide range of grammar concepts consistently and correctly while speaking and writing; participate in conversations and respond appropriately to conversational prompts; analyze and compare cultural practices, products, and perspectives of various French-speaking countries; read and analyze important pieces of French literature; and take frequent assessments to monitor progress. The course is conducted almost entirely in French, and is aligned to national standards as set forth by ACTFL (American Council on the Teaching of Foreign Languages).

**Prerequisite:** French II

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: German I

Course Number: World Language

Credits: 1

## **Course Description**

This introductory course teaches basic communication and comprehension in German. It coordinates the study of language with culture through the use of video, audio, and mass media. This course introduces the fundamentals of German conversation and grammar. Students will begin to develop a functional competency in the four primary language areas: Speaking, reading, listening, and writing; and establish a solid grammatical base. In the second semester, students will further develop their skills in pronunciation, grammar, grammar structures, and vocabulary. The different cultures of the German-speaking world are emphasized through readings, videos, and other activities.

**Prerequisite:** NA

10th, 11th, or 12th Grade Course: German II

Course Number: World Language

Credits: 1

## **Course Description**

In this course, students will build on their German grammar and language skills. Students will review basic grammar skills, learn and study stem-changing verb conjugation, and explore cultural themes regarding current events, famous German people, music, and festivals. In the second semester, students will increase their proficiency by forming more complex sentences. Cultural themes are entwined throughout the course.

**Prerequisite:** German I

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: Latin I

Course Number: Language

Credits: 1

#### **Course Description**

Latin I has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multimedia presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** NA

**Difference between college placement and honors:** NA

10th, 11th, or 12th Grade Course: Latin II

Course Number: World Language

Credits: 1

#### **Course Description**

Latin II has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multimedia presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** Latin I

10th, 11th, or 12th Grade Course: Latin III

Course Number: World Language

Credits: 1

#### **Course Description**

Latin III has been carefully designed to focus on successful communication through speaking, writing, reading and listening, as well as a thorough grounding in aspects of culture. Each unit embodies all of these standards in accordance with the theories described in this document. Unit activities blend different forms of communication and culture to ensure that the student meets all standards. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multimedia presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes and exams. Learning activities in each unit are focused upon a specific theme.

**Prerequisite:** Latin II

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: Spanish I

Course Number: 601

Credits: 1

#### **Course Description:**

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.

Prerequisite(s): None

Difference between college placement and honors: NA

9th, 10th, 11th, or 12th Grade Course: Spanish II

Course Number: 602

Credits: 1

#### **Course Description:**

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 (a full year means 1 credit earned, class taken 4 or 5 days a week in previous school) of Spanish I in order to take Spanish II. Students may be placed in Spanish II by placement testing. Students must request the Spanish II placement exam during the first week of classes in order to be considered for Spanish II.

**Prerequisite(s):** Spanish I

10th, 11th, or 12th Grade Course: Spanish III

Course Number: 603

Credits: 1

#### **Course Description:**

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.

**Prerequisite(s):** Spanish I and II

Difference between college placement and honors: NA

11th or 12th Grade Course: AP Spanish

Course Number: 605

Credits: 1

#### **Course Description:**

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.

**Prerequisite(s)**: None

<u>Difference between college prep and AP:</u> AP courses are more challenging and detailed and assessments are different. AP students are expected to do more independent reading, writing, and speaking (usually in class presentations).

## **Electives**

## **Fine Arts Electives**

A quality Fine Arts program reflects the standards in which students create, perform and produce. All students must complete 1 full credit of Fine Arts in order to meet graduation requirements. At a minimum, such a curriculum encompasses four basic aspects, with the expectation that students will:

- 1. Create and perform the arts
- 2. Understand the role and importance of the arts in culture and history
- 3. Perceive and respond to the qualities of the arts
- 4. Value the major art works and artists of the discipline
- 5. Make sound judgments about the arts and understand the bases on which those judgments

rest (Arts Education Partnership Working Group 1993, p. 5)

9th, 10th, 11th, or 12th Grade Elective: Journalism (Full year)

Course Number: 223

Credits: 1.0

#### **Course Description:**

In this 21st century, cross curricular, project-based class, students work collaboratively by using technology such as digital cameras, photo editing software and Jostens Yearbook Avenue online design software to digitally produce Saint Joseph's yearbook each year. Students use writing skills, communication skills and creativity to tell the story of the school community and peers in an engaging way. Students demonstrate knowledge of graphic design and think creatively when organizing information within the yearbook. In this college and career ready course, students think critically to meet deadlines, track to goals and utilize multimedia to market and disseminate information that aligns with and models an actual business.

**Prerequisite(s):** None \*Teacher approval if continuing the course each school year.

Difference between college placement and honors: NA

9th, 10th, 11th, or 12 Grade Elective: Theatre

Course Number: 210

Credits: 0.5

#### Theatre I

#### Intro to Theatre

Students will explore historical developments of performing arts, types of plays and introductory elements of the production process. Students will explore the creative process and get an introduction to acting and character development.

\*No prerequisite

#### Theatre II

## Advanced Performance

With an emphasis on performance, Theatre II will give students opportunities to enhance their on-stage presence and ability to engage audience members through a series of experiences. Students will gain a deeper understanding of character development and acting techniques.

*Prerequisites:* 

#### Theatre III

#### Advanced Production

Students who are interested in the production process will gain experience in selecting, developing, casting, directing and designing a show, beginning with simple scenes and advancing to an entire three act show. Students will gain insight into the production process through relationships at Penn State and

<sup>\*</sup>Students must have taken Theatre I

<sup>\*</sup>Students who have not taken Intro to Theatre may speak to instructor for an exemption

other professional theatres. Advanced production students will be expected to take on a more vital role in the planning and production of the Spring Musical as well.

Prerequisites:

\*Students must have taken Theatre I (Theatre II is highly recommended)

9th, 10th, 11th, or 12 Grade Elective: Creative Writing

Course Number: 220

Credits: 0.5

### **Course Description:**

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.

**Prerequisite(s):** None

9th, 10th, 11th, or 12 Grade Elective: A Cappella Choir A through H

Course Number: 809

Credits: 0.5

#### **Course Description:**

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.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Drawing & Painting I

Course Number: 812

Credits: 0.5

#### **Course Description:**

Designed for the beginning student, this course explores several drawing mediums including pencil, pen and ink, charcoal and pastels. Beginning to plan and develop compositions using perspective will be covered. Introduction to watercolor techniques and color theory.

**Prerequisite(s):** None

<sup>\*</sup>Students who have not taken Theatre I and/or II may speak to instructor for an exemption

9th, 10th, 11th, or 12th Grade Elective: Drawing and Painting II

Course Number: 815

Credits: 0.5

#### **Course Description:**

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.

**Prerequisite(s):** Drawing & Painting I

9th, 10th, 11th, or 12th Grade Elective: Photography/Video I

Course Number: 741

Credits: 0.5

## **Course Description:**

The course is for students who want to learn to use a digital camera (SLR) to take better photos as well as learn what makes a successful photo. Students will learn about the camera anatomy and settings, as well as editing skills for their photos. History of photography and video will be covered, as well as famous photographers. The course has several projects that build up photography skills, working with the elements of art, composition, and editing software without overwhelming the student photographer. Students will create and develop video skills.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Photography/Video II

Course Number: 742

Credits: 0.5

#### **Course Description:**

In this course students will expand their learning about Photography with projects that are more in depth, such as Action and Sports photography, photojournalism, portraiture, Bokeh, Architecture, Landscape, etc. Each student will put together a portfolio of their work by the semester. Students will continue to work on editing skills using software. Students will improve video skills.

Prerequisite(s): Must have completed Photography/Video I with a grade of B

10th, 11th, or 12th Grade Elective: Sculpture

Course Number: 817

Credits: 0.5

#### **Course Description:**

Students will learn to use various materials to create 3 dimensional projects. Paper, plaster, clay, and wire will be among the materials 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.

Prerequisite(s): None

Difference between college placement and honors: NA

10th, 11th, or 12th Grade Elective: Advanced Art I

**Course Number: 816** 

Credits: 0.5

#### **Course Description:**

This course is recommended for students who require a portfolio for college or working towards taking the AP course. Students will build upon skills acquired in Drawing and Painting II. A variety of wet and dry drawing materials will be used to render complex subject matter. Students will use the creative process of planning and executing various drawing and painting challenges for example, the human face and body. Students will apply rules to create realistic objects in their work. Students will be required to keep a sketchbook.

Prerequisite(s): Drawing & Painting I & II

10th, 11th, or 12th Grade Elective: Advanced Art II

Course Number: 819

Credits: 0.5

#### **Course Description:**

Course is recommended for students who require a portfolio for college or working towards the AP course. In this course students will continue to expand on developing their composition skills and developing mastery of different art materials such as charcoal, watercolor and acrylic painting. The student is expected to apply problem solving techniques to improve their mastery of different materials. For example compositions will include more than one person or object.

Prerequisite(s): Advanced Art I

11th or 12th Grade Elective: AP Advanced Art I & II

Course Number: 820

Credits: 1.0

#### **Course Description:**

This is a rigorous studio course offered to highly motivated students who have completed most of the elective courses offered in art. Coursework is designed to continue mastery in technique and composition/design and research.

artwork. Each of the 15 pieces will reflect this process as it is produced. Students are

A student must be prepared to put 3-5 hours a week outside of the classroom. They will need to submit a portfolio that consists of 15 pieces of artwork that are based on a "theme statement", and 5 other pieces that would be mailed to be judged in May to the College Board. This course consists of research, practice and experimentation to reach a final piece of

expected to take the AP exam at the end of the course and pay the AP exam fee of \$100 in the beginning of the school year in order to sit for the exam.

<u>Prerequisite(s):</u> Drawing & Painting I & II, Completion of Advanced Art I & II with a grade of 87% (B+) or higher, a portfolio of 5 pieces of their artwork, and teacher recommendation.

<u>Difference between college Advanced Art and AP Advanced Art:</u> Preparing students with an art portfolio in order to pursue a career in art. Students will take the AP exam at the end of the course.

## **Social Science & Pre-Career Electives**

9th, 10th, 11th, or 12th Grade Elective: Introduction to Legal Studies I

Course Number: 583

Credits: 0.5

## **Course Description:**

This foundation of law class helps students to understand why we live under the rule of law, and how laws are created, enforced, interpreted, and changed. The course enables students to examine diverse areas of law, including criminal, civil, constitutional, and international. It also explores civil rights issues and the role of advocacy, civics, and the media in our legal system.

Introduction of Legal Studies I will explore 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.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Introduction to Legal Studies II Course Number: 584

Credits: 0.5

#### **Course Description**

This course in foundations of criminal justice provides students with a broad overview of the criminal and juvenile justice systems. Students learn about historical developments and current practices in criminal law, corrections, and the courts. Throughout the course, they explore the meaning of *crime* and *justice*, and the relationship between criminal justice and social justice.

**Prerequisite(s):** Introduction to Legal Studies I

# 9th, 10th, 11th, or 12th Grade Elective: Philosophies of Leadership

Credits: 0.5

Course Number: 13027

An interactive, discussion-based course that explores historical, cultural, and contemporary approaches to leadership. Students will examine the philosophies and practices of influential leaders across diverse fields—politics, education, business, sports, and social movements, while analyzing how values and ethics shape effective leadership. Through readings, case studies, group projects, and reflective practice, students will compare leadership theories (e.g., servant leadership, transformational leadership, situational leadership), with the goal of developing their own personal leadership philosophy. The course emphasizes critical thinking, communication, and collaboration, empowering students to apply leadership principles in both school and community settings.

**Prerequisite(s):** None

10th, 11th, or 12th Grade Elective: Introduction to Psychology: Optional Dual Enrollment

Course Number: 571

Credits: 0.5

## **Course Description:**

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.

Prerequisite(s): None

10th, 11th, or 12th Grade Elective: Introduction to Sociology: Optional Dual Enrollment

Course Number: 571.a

Credits: 0.5

## **Course Description:**

This course is an introduction to the study of sociology. The primary scope of the course will include the following: principles of learning, the study of human behavior, memory, personality development, social life, social causes and the changes in social behavior. Students will discover how and why people interact within these social contexts.

Prerequisite(s): None

10th, 11th, or 12th Grade Elective: Introduction to Athletic Training and Sports Medicine

Course Number: 586

Credits: 0.5

## **Course Description:**

Athletic training and Sports Medicine: 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 musculoskeletal rehabilitation.

Prerequisite(s): None

11th or 12th Grade Elective: Fitness and Nutrition

Course Number: 416

Credits: 0.5

#### **Course Description:**

This course will teach students the fundamentals of strength and conditioning and nutritional science. Students will learn to develop fitness programs for various exercise related goals as well as how to execute those programs in a safe and healthy way. Students will also learn how to use nutrition to fuel performance, build muscle, lose weight, or fight disease.

Prerequisite(s): None

## **Business Electives**

9th or 10th Grade Elective: Business Dynamics

Course Number: 703

Credits: 0.5

#### **Course Description:**

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.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Fundamentals of Sports Management

**Course Number: 710** 

Credits: 0.5

#### **Course Description**

Fundamentals of Sports Management is designed to give students learning experiences & practical skills to work in the field of sport. Although this course may interest those who have an interest in sports participation, this course is designed to train individuals to work in high school, college, and professional sports departments in ways that promote critical thinking and problem solving skills.

An understanding of the fundamentals of sports management will be gained through reading, examination, lectures/discussions, and practical applications/experiences helping with events.

Course topics may include principles/functions of management; sport policy and governance; facilities, events, and operations; sport law; sport media; and ethics. Practical applications may include designing and setting up facilities to ensure safety; learning how to maintain equipment; managing budgets; understanding proper ways to maintain playing surfaces; developing effective press releases/public address documents; incorporating use of technology; and coordinating website design/maintenance.

9th, 10th, 11th, or 12th Grade Elective: Sports, Media, & Society (Formerly Intro to Sports

Media)

**Course Number: 711** 

Credits: 0.5

#### **Course Description**

Sports, Media, and Society will critically examine the function of sport within American culture and the role that media plays. Issues of race, gender, stereotypes, and disability in sport will be examined. Students will engage in a qualitative research project and will learn the fundamentals to creating and conducting formal research.

Prerequisite(s): None

11th or 12th Grade Elective: Business Marketing

Course Number: 704

Credits: 0.5

#### **Course Description:**

Marketing is a survey course examining a number of basic marketing theories. A foundation of marketing terms and concepts will be established before exploring elements such as a SWOT analysis, global economy, legal and ethical issues, communication skills, management, financial literacy, promotion, market research, product and service management, entrepreneurship, and career development. Students will focus largely on Social Media marketing through the use of real-world applications on Saint Joseph's social media platforms. Prerequisite(s): None

11th or 12th Grade Elective: Business in a Global Society/OptionalDual Enrollment\*

(Fall Semester Only)

Course Number: 710

Credits: 0.5

### **Course Description:**

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, his college-level is designed to show students the exciting prospects for a career in the world of commerce. This course is available for dual enrollment through Saint Francis.

Prerequisite(s): None

# Science, Technology and Engineering Elective

9th, 10th, 11th, or 12th Grade Elective: Aviation and Drones

Course Number: 13270

Credits: 1.0

This course will provide the foundation for advanced exploration in the areas of flying and unmanned aircraft systems. Students will learn about engineering practices, problem solving, and the innovations and technological developments that have made today's aviation and aerospace industries possible. Students will also learn about the wide variety of exciting and rewarding careers available to them. The ninth-grade course will inspire students to consider aviation and aerospace careers while laying the foundation for continued study in grades 10 through 12 and beyond.

9th, 10th, 11th, or 12th Grade Elective: Engineering A

Course Number: 731

Credits: 0.5

### **Course Description:**

The course will provide students with an exposure to a career in engineering through various project based learning opportunities. The goal of this course is for students to understand and apply the engineering design process on an elementary scale to complete a variety of engineering challenges. Each project will require basic drawing, mathematical analysis, hands-on prototyping, and presenting of ideas that are emblematic of real world engineering design projects. Periodically, some research will be conducted into various engineering disciplines for students to explore the diverse world of engineering. Projects vary each year,

but primarily focus on mechanical, architectural, structural, and new product engineering. Throughout the course, basic computer drafting and programming techniques are explored. However, the purpose of this course is not to learn advanced programming. Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Engineering B

Course Number: 731

Credits: 0.5

### **Course Description:**

The course will provide students with an exposure to a career in engineering through various project based learning opportunities. The goal of this course is for students to understand and apply the engineering design process on an elementary scale to complete a variety of engineering challenges. Each project will require basic drawing, mathematical analysis, hands-on prototyping, and presenting of ideas that are emblematic of real world engineering design projects. Periodically, some research will be conducted into various engineering disciplines for students to explore the diverse world of engineering. Projects vary each year, but primarily focus on mechanical, architectural, structural, and new product engineering. Throughout the course, basic computer drafting and programming techniques are explored. However, the purpose of this course is not to learn advanced programming.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Engineering C

Course Number: 731

Credits: 0.5

## **Course Description:**

The course will provide students with an exposure to a career in engineering through various project based learning opportunities. The goal of this course is for students to understand and apply the engineering design process on an elementary scale to complete a variety of engineering challenges. Each project will require basic drawing, mathematical analysis, hands-on prototyping, and presenting of ideas that are emblematic of real world engineering design projects. Periodically, some research will be conducted into various engineering disciplines for students to explore the diverse world of engineering. Projects vary each year, but primarily focus on mechanical, architectural, structural, and new product engineering. Throughout the course, basic computer drafting and programming techniques are explored. However, the purpose of this course is not to learn advanced programming.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Engineering D

Course Number: 731

Credits: 0.5

**Course Description:** 

The course will provide students with an exposure to a career in engineering through various project based learning opportunities. The goal of this course is for students to understand and apply the engineering design process on an elementary scale to complete a variety of engineering challenges. Each project will require basic drawing, mathematical analysis, hands-on prototyping, and presenting of ideas that are emblematic of real world engineering design projects. Periodically, some research will be conducted into various engineering disciplines for students to explore the diverse world of engineering. Projects vary each year, but primarily focus on mechanical, architectural, structural, and new product engineering. Throughout the course, basic computer drafting and programming techniques are explored. However, the purpose of this course is not to learn advanced programming.

Prerequisite(s): None

9th, 10th, 11th, or 12th Grade Elective: Research and Design (R&D)

Course Number: 785

Credits: .05

### **Course Description:**

The Research and Design course will give students the opportunity to learn the skills needed for laboratory research. Students will have the opportunity to investigate a science problem and develop a self-designed procedure to conduct the research. Work will be shared collaboratively to investigate a common question. Areas of research could include any of the STEM disciplines. Proper data collection, laboratory techniques, and data analysis will be taught and implemented. Collaboration with faculty at Penn State University will help students gain feedback on research initiatives. Through research and investigation, students will be exposed to various careers in the STEM field. This course will also prepare students for future participation in the Pennsylvania Junior Academy of Science (PJAS) regional and state competition which is offered as a club opportunity.

Prerequisite(s): None

<u>Co-requisites(s)</u>: If students are preparing to participate in PJAS, it is recommended, but not required, that students take this course in 9th or 10th grade.

11th, or 12th Grade Elective: Computer Science I

Course Number: 733

Credits: 1.0

#### **Course Description:**

An interactive introductory course for students brand new to programming that teaches the foundations of computer science using the Python language. Not only will this semester or year long course prepare students for AP Computer Science A and AP Computer Science Principles, but it will teach students how to think computationally and solve complex problems, skills that are important for every student.

**Prerequisite(s):** Algebra I, No prior CS experience required.

11th, or 12th Grade Elective: AP Computer Science Course Number:

#### Credits: 1.0

## **Course Description:**

AP Computer Science A is a programming class in Java, a popular in-demand programming language. Java is used to build server-side applications, games, and financial applications, and is the core foundation for developing Android apps. Students will be introduced to topics that include problem-solving, design strategies and methodologies, organization of data, approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. Language: Java Students are expected to take the AP exam at the end of the course and pay the AP exam fee of \$100 in the beginning of the school year in order to sit for the exam.

**Prerequisite(s):** Completion of Intro to Computer Science, and Computer Science Principles and Algebra II preferred

## **General Studies**

9th, 10th, 11th, and 12th Grade Course: Physical Education

**Course Number: 903** 

Credits: 0.5

#### **Course Description:**

Physical Education classes are designed to practice and develop skills in activities & exercises that will help students maintain fitness throughout their life. This class will provide instruction and activity designed to foster an understanding and appreciation of participation in weight training, conditioning, & various team activities; and how such participation can be a part of a healthy and active lifestyle. Activities might include sports such as flag football, ultimate, basketball and volleyball. In addition, students will be introduced to basic cardiorespiratory and weight training exercises. Discussion and activities will also be included to provide exposure to the key components of fitness of cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition. Active participation is required to facilitate the learning experience. Students will routinely be teamed with classmates for play and sports preparation/conditioning activities. All students must have a completion of 1 full credit of Physical Education for graduation requirements.

During all Physical Education classes, students are required to wear a blue or grey plain t-shirt, any colored shorts and appropriate footwear.

**<u>Prerequisite(s):</u>** Blue or Grey plain t-shirt, any colored shorts and appropriate footwear.

10th Grade Course: Health

Course Number: 415

Credits: 0.5

#### **Course Description:**

This required course will introduce students to the fundamentals of Health and Wellness. Students will study physical and mental health as well as develop a basic understanding of nutrition, substance abuse, and reproduction. Students will be challenged to consider ways in which their lifestyle contributes to their own health and wellness as well as learn to advocate for the health and wellness of their community.

Prerequisite(s): None

11th Grade Course: College Readiness

Course Number: 902

Credits: 0.50

### **Course Description:**

This course is specifically designed in accordance with the alignment of Saint Joseph's Catholic Academy's college planning timeline. Students will be introduced to the college application processes involving our college application portal *Naviance*. They will utilize self-discovery tools, career cluster finders and strength inventories to determine which skill-sets and attributes they possess in order to determine their pathway beyond high school. Students will familiarize themselves with the *Common Application* and the essay requirements for college which results in the accumulation of a three-part project at the end of the course inclusive of essay comparisons, a critical analysis and final essay. Participants will learn how to apply and obtain scholarships, navigate graduation audits and understand the complexities of getting into college.

<u>Prerequisite(s):</u> Sophomores with recommendation. Juniors preferred.