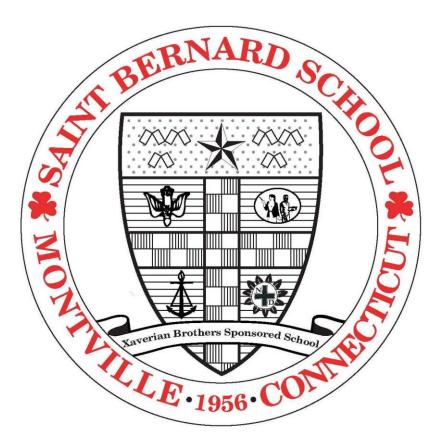
# Saint Bernard School



# Course Description Book Academic Year 2018-2019

#### MIDDLE SCHOOL REQUIREMENTS

#### 6th Grade

Religion Language Arts Mathematics Social Studies Science Foreign Language Art ½ year Music ½ year

#### <u>7th Grade</u>

Religion Language Arts Mathematics Social Studies Science Foreign Language Art (1 semester Music (1 semester)

#### 8th Grade

Religion Language Arts Mathematics Social Studies Science French I or Spanish I Choice of: Band, Choir, P.E., Fine Arts, Study Hall

#### **HIGH SCHOOL GRADUATION REQUIREMENTS: 28 CREDITS**

4 credits in Theology

4 credits in English

4 credits in Math

3 credits in Social Studies

(1.5 United States History & 1.5 World History)

3 credits in Science

(including 1 Biology & 1 Chemistry)

2 credits in Foreign Language

1 credit in Fine Arts

1 credit in Physical Education

.5 credit in Health

5 credits of Elective offerings

Course credit: All one semester courses are .5 credit each; two semester courses are 1 credit, with any exceptions noted.

# High School Total Credits: 28 (23 Required/5 Elective)

4 Theology	3 History	1 Fine Arts	
4 English	2 Language		
4 Mathematics	.5 Health (required before entering $11^{th}$ grade)		
3 Science	1 P.E. (required before entering 12 <sup>th</sup> grade)		

Student Name

Date \_\_\_\_\_

Grade 9	Grade 10	Grade 11	Grade 12
Theology World Literature Mathematics World History 1 Biology Spanish I,II/French I,II/ESL Fine Arts 1/Band/Chorus Health	Theology World Literature Mathematics World History 2 (.5) U.S. Government and Civic (.5) Chemistry Spanish II,III/French II,III/ESL Elective:	Theology American Literature/AP Literature and Composition Mathematics U.S. History/A.P. AP Chemistry/Bio, Anatomy & Physiology, Physics, Environmental, Forensic Science(.5), Organic Chemistry(.5) Elective:	Theology British Literature/AP Literature & Composition Mathematics Elective:
7.5 Credits	7.5 Credits	7.0 Credits	7.0 Credits

# **THEOLOGY**

Saint Bernard School is a Catholic school. The Theology courses at Saint Bernard are taught in conformity with the teachings of the Roman Catholic Church. The courses offered provide students with an opportunity to become aware of the richness of the Catholic faith, to deepen their spiritual growth and development, and to foster an intellectual inquiry into selected areas of the study of Theology. No attempt is made to proselytize or seek to convert non-Catholic students through this course of study.

Four (4) years of high school Theology are required for graduation.

#### **6<sup>TH</sup> GRADE RELIGION (066)**

<u>Grade</u>: 6 Duration: 2 semesters

<u>Description</u>: Using the Loyola Press *Christ Our Life* series, students will study the Old Testament.

#### 7<sup>TH</sup> GRADE RELIGION (077)

<u>Grade</u>: 7 Duration: 2 semesters

<u>Description</u>: Using the Loyola Press *Christ Our Life* series, students will study the New Testament.

#### **8<sup>TH</sup> GRADE RELIGION (088)**

<u>Grade</u>: 8 Duration: 2 semesters

<u>Description</u>: Using the Loyola Press *Christ Our Life* series, students will study the History of the Church.

#### **INTRODUCTION TO CATHOLICISM (011)**

<u>Grade</u>: 9 <u>Duration</u>: 2 Semesters

<u>Description</u>: This course is an introduction to the Theology curriculum. The focus is to present the essential beliefs of the Catholic faith. The course will survey topics that include the concept of God; the Person of Jesus Christ; the Creed; the Ten Commandments; the role

of the Church as the teacher and guide to understanding the Faith, Prayer, and Sacraments; and the Blessed Virgin Mary.

<u>Course Requirements:</u> Homework, quizzes, tests, projects, meaningful class participation, mid-term, and final exam.

#### **INTRODUCTION TO SACRED SCRIPTURE (021)**

<u>Grade</u>: 10 <u>Duration</u>: 2 semesters

<u>Description</u>: This course follows the introductory course by examining Sacred Scripture as the divinely revealed Word of God. The student will examine both the oral and written tradition of God's covenant with His Chosen People in the Old Testament and with us today in the New Testament. The student will study the meaning and words of the Creation narratives, the lives of Abraham, Isaac, Jacob, Moses, the Kings and the Prophets. In the New Testament, the student will study the Gospels, some Epistles, the Acts of the Apostles, and a brief examination of the book of Revelation. This course intends to lead the student to a fuller understanding of the words and works of Jesus Christ as Redeemer and Savior of His People and His active role in our lives today.

<u>Course Requirements</u>: Homework, quizzes, tests, projects, reflection papers, article analysis, meaningful class participation, mid-term, and final exam.

#### MAKING MORAL DECISIONS/CHURCH HISTORY (031)

<u>Grade</u>: 11 Duration: 2 semesters

<u>Description</u>: The first semester provides the students with the fundamental principles of Catholic moral decision-making including such topics as free will, conscience, grace, the Ten Commandments, and virtues. This course hopes to enable the student to make good moral decisions in their lives and to assist them in forming a strong Christian conscience in order to make ethically and morally sound decisions. The second semester provides the student with an overview of the history of the Catholic Church from its earliest roots to modern times. The focus of the course will be on major people, places, and events that had a significant impact on the spreading of the Gospel message from the time of the Apostles.

<u>Course Requirements</u>: Homework, quizzes, tests, projects, reflection papers, article analysis, meaningful class participation, mid-term, and final exam.

#### JUSTICE AND PEACE/CHRISTIAN LIFESTYLES (041)

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters

3/2/17

<u>Description</u>: The first semester explores the Biblical and Church foundations for justice and our response to those who are "the least" in our society. Issues such as poverty, racial prejudice, peace-making and other topics will be discussed. The second semester focuses on the lifestyles we are called to live by our Baptism: the single life, married life, religious life, or the priesthood. Recognizing that all the baptized are called to a vocation to holiness, the student will explore the different vocational choices in order to become fully mature in the service of Christ and His Church. Communication, appropriate expression of self and other values and principles for making mature decisions are included.

<u>Course Requirements</u>: Homework, quizzes, tests, projects, reflection papers, note-taking, meaningful class participation, and mid-term exam.

# <u>ENGLISH</u>

The English curriculum is designed to prepare students to function effectively in an everchanging and complex environment. The curriculum stresses necessary communication skills coupled with critical thinking skills that will promote Saint Bernard School's mission and philosophy. Students will take the English courses in the sequence that they are presented. The Administration must approve any variance to this requirement. All English courses close after two weeks.

Students in all grades will participate in a summer reading program. Students will be given one assigned text and will choose two self-selected works (Honors-level courses will have additional assigned titles; AP has a separate program). The self-selected works may be from a list provided, or works of similar literary merit. Students will submit a Parent Verification Form along with a written assignment at the beginning of the school year. Specifics about the program are distributed in the spring.

Four (4) years of high school English are required for graduation.

#### **6<sup>TH</sup> GRADE LANGUAGE ARTS (166)**

<u>Grade</u>: 6 <u>Duration</u>: 2 semesters

<u>Description</u>: The 6<sup>th</sup> grade Language Arts class focuses on four components – Grammar, Reading, Writing, and Vocabulary. Students are encouraged to read and respond to classroom literature and self-selected novels. Knowledge and application of critical thinking skills are explored in journal writing. Students are introduced to the fiveparagraph essay and complete a research project. Sentence structure, grammar, and vocabulary are emphasized in all class assignments. **7<sup>TH</sup> GRADE ENGLISH (177)** Grade: 7

<u>Duration</u>: 2 semesters

<u>Description</u>: The 7<sup>th</sup> grade English class emphasizes five components: Grammar, Reading, Writing, Vocabulary, and Speaking. Grammar is explored throughout the year in a variety of writing assignments. Critical thinking skills will be utilized for various literary works and are reflected in discussions, five-paragraph five-paragraph essays, journal writing, and a research project. Selected class assignments are also used to improve speaking skills. Sentence structure, grammar, spelling, and vocabulary are emphasized in all assignments.

#### 8<sup>TH</sup> GRADE ENGLISH (189)

<u>Grade</u>: 8 <u>Duration</u>: 2 semesters

<u>Description</u>: The 8<sup>th</sup> grade English class emphasizes five components: Grammar, Reading, Writing, Vocabulary, and Speaking. Students are exposed to fiction, non-fiction, and poetry. Grammar and vocabulary are explored separately and then infused into the writing program. The five-paragraph paper is emphasized in several types of written assignments including persuasive, expository, descriptive, informative, and compare/contrast essays. Critical-thinking skills are utilized as students explore many issues in various literary works and reflect through discussions, presentations, and journaling. Sentence structure, grammar, spelling, and vocabulary are emphasized in all class assignments.

#### HONORS WORLD LITERATURE (110)

Grade: 9

<u>Duration</u>: 2 semesters <u>Prerequisite</u>: Selection based on entrance exam score and Grade 8 English/Language Arts grade.

<u>Description</u>: Honors World Literature will chronologically present representative selections of the literature of the world. Each culture will be given an historical context, a summary of major literary and philosophical movements, and writers' techniques. Work in this course will be done to improve critical reading, thinking, and writing with an emphasis on literary analysis. Vocabulary will be studied from an assigned book as well as from the literature. Writing skills will focus on the development of the five-paragraph essay and research papers.

<u>Course Requirements</u>: Students will be doing an in-depth study of vocabulary, critical and analytical reading, grammar, and writing. They will be required to do a research paper each marking period. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### **FRESHMAN ENGLISH FOR NON-NATIVE SPEAKERS (116)**

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters

<u>Description</u>: This course is designed for non-native speakers who need fundamentals in grammar, vocabulary, speaking, reading, and writing. It complements English 112, World Literature. Students will be introduced to literary terms and devices in a variety of genres including poetry, novels, drama, the epic and short story. Vocabulary will be studied from an assigned text as well as from literature selections.

<u>Course Requirements</u>: Students will be doing an in-depth study of vocabulary, critical and analytical reading, grammar, and writing. They will be required to do a research paper each marking period. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### WORLD LITERATURE (112)

<u>Grade</u>: 9

Duration: 2 semesters

<u>Description</u>: World Literature will chronologically present representative selections of the literature of the world. Each culture will be given an historical context, a summary of major literary and philosophical movements, and writers' techniques. Vocabulary will be studied from an assigned book as well as from the literature. Writing skills will focus on the development of the five-paragraph essay.

<u>Course Requirements</u>: Students will have nightly assignments. Grades will include tests, quizzes, written assignments, and oral presentations/participation. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### **HONORS BRITISH LITERATURE (120)**

<u>Grade</u>: 10 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors World Literature or 90+ average in World Literature and teacher recommendation

<u>Description</u>: Honors British Literature is a chronological survey of the literature of Great Britain in literary and cultural contexts from the Anglo-Saxon period to the relative present. Representative works from the major genres will be read and responded to orally and in writing. Emphasis will be placed on literary analysis and critical reading, thinking, and writing. Vocabulary will be studied from an assigned text and from the literature selections.

<u>Course Requirements</u>: Students will be doing an in-depth study of vocabulary, critical and analytical reading, grammar, and writing. They will be required to do a research paper

each marking period. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### **BRITISH LITERATURE (122)**

<u>Grade</u>: 10 <u>Duration</u>: 2 semesters

<u>Description</u>: British Literature is a chronological survey of the literature of Great Britain in literary and cultural contexts from the Anglo-Saxon period to the relative present. Representative works from the major genres will be read and responded to orally and in writing. Emphasis will be placed on literary analysis and critical reading, thinking, and writing. Vocabulary will be studied from an assigned text and from the literature selections.

<u>Course Requirements</u>: Students will have nightly assignments. Grades will include tests, quizzes, written assignments, and oral presentations/participation. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### SOPHOMORE ENGLISH FOR NON-NATIVE SPEAKERS (117)

<u>Grade</u>: 10 <u>Duration</u>: 2 semesters

<u>Description</u>: This course is designed for non-native speakers who need fundamentals in grammar, vocabulary, speaking, reading, and writing. It complements English 122, British Literature. Students will be introduced to literary terms and devices in a variety of genres including poetry, novels, drama, the epic and short story. Vocabulary will be studied from an assigned text as well as from literature selections.

<u>Course Requirements</u>: Students will be doing an in-depth study of vocabulary, critical and analytical reading, grammar, and writing. They will be required to do a research paper each marking period. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### **ADVANCED PLACEMENT ENGLISH LANGUAGE & COMPOSITION (143)**

<u>Grade:</u> 11 <u>Duration:</u> 2 semesters <u>Prerequisite:</u> Departmental placement, Student application

<u>Description:</u> The Advanced Placement English/Language and Composition course is designed to help students become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts and to become skilled writers who can compose for a variety of purposes commensurate with introductory college level courses. This course will provide students with the information necessary to read analytically, formulate theories and arguments based on the readings, and respond by composing articulate essays that

utilize advanced elements of sentence structure, syntax, style, purpose and tone. Students will understand rhetorical principles employed by writers and incorporate this knowledge in their own critical thinking as well as written work. In addition, students will be required to thoroughly research relevant topics, synthesize information from a variety of sources, and document their knowledge according to MLA standards.

<u>Course Requirements:</u> Completion of a summer reading program is required. Students will also sit for the AP English Language and Composition exam in May.

#### **AMERICAN LITERATURE (132)**

<u>Grade</u>: 11 <u>Duration</u>: 2 semesters

<u>Description</u>: Students consider American Literature from 1607 to the present. The chronological approach to the study of American Literature is not done in isolation but in the historical and philosophical milieus of its creation. Composition and vocabulary are studied within the course to prepare students for the Scholastic Aptitude Tests. Student composition is stressed with students writing their papers utilizing expository and argumentative techniques. In the fourth quarter, students will prepare their resumes and a sample college essay in anticipation of the college application process.

<u>Course Requirements</u>: Nightly readings are assigned and students are tested on those nightly readings to ensure proper comprehension. Note taking and test taking skills are stressed. The cumulative writing portfolio will be continued. Completion of a summer reading program is required.

#### **ADVANCED PLACEMENT ENGLISH LITERATURE & COMPOSITION (149)**

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Departmental placement, student application

<u>Description:</u> The Advanced Placement English/Literature and Composition course is planned to lead a group of students to attain the level of reading and writing skills commensurate with introductory college level courses. In class, students will closely study a number of works in conjunction with outside readings. Students will be encouraged to test their responses to these works against their peers, the instructor, and literary critics. The study of literature will focus on perceptive reading and critical analysis of literature. Individual works will be examined with regard to language, character, theme, structure, meaning, and value. Students will learn and use the vocabulary of literary criticism. The general areas of language and composition will also be pursued in regard to organization of ideas and the resources of language available for the honest, concise, and effective expression of ideas. The syllabus for this course has been audited and approved by the College Board. <u>Course Requirements</u>: Completion of a summer reading program is required. Students will also sit for the AP English Literature and Composition exam in May. In-class writing will be done in response to prompts from previously administered AP exams. A 25-page (minimum) term paper will be written in this course. Cumulative writing portfolios will be completed.

#### LITERATURE OF THE SEA

#### <u>Grade:</u>12

Duration: 2 semesters

<u>Description:</u> Given the geographic proximity of the St. Bernard School community to the sea and the close ties many of its families feel to the ocean, this course serves as a valuable way for students to forge connections to literature.

Students will read a sampling of literature in which the sea acts in a number of ways: a setting, a symbol, a mystery, a challenge, an agent of divine wrath, a means of escape, and ultimately a reason to reflect on the relationship of humans and nature. Field trips to the Mystic Seaport and New London Custom House are also being planned. Emphasis will be placed on literary analysis and critical reading, thinking, and writing. Vocabulary will be studied from an assigned text and from the literature selections.

Course Requirements: Students will read and respond to literature in a variety of modes. Students can expect nightly homework and a research paper every quarter. The Cumulative writing portfolio will be completed for use in the college application process. Completion of a summer reading program is required.

# **ENGLISH ELECTIVES**

**NOTE**: Elective courses *DO NOT* satisfy the English requirement for graduation. An elective course is offered only if enough students subscribe to the course. The decision to offer an elective course is an administrative decision.

#### **CREATIVE WRITING (150)**

Grade: 11, 12

Duration: 1 semester

<u>Description</u>: Creative Writing acknowledges and celebrates the mystery as well as the fundamentals which encompass the creative writing experience and endeavors. Students are guided from the most basic process of putting words on paper, to learning about the disciplines and tools that will help students know writing both as self-discovery and as a disciplined approach to creative expression and exploration. Literary genres (poetry, non-fiction and short story), their terms, definitions, and approaches are presented to produce pieces that encompass creativity and discipline. Revisions and appropriate exercises help students realize the potential of their works. Enrollment will be limited to 20 students, with seniors given preference.

<u>Course Requirements:</u> Daily journaling and a writing portfolio.

#### **PUBLIC SPEAKING (155)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 1 semester

<u>Description</u>: The citizens of the 21<sup>st</sup> Century must be able to express themselves effectively orally. Public Speaking will prepare students for that task. Topics to be considered include the relationship of the student to public speaking and the value of public speaking, the role of the speaker and listener; the primary methods and tools of the speaker (including voice, non-verbal delivery, audience analysis, topic selection, delivery); and speech preparation. Students will deliver basic speeches to inform on a variety of topics. Students will be given time to research their topics and to prepare their speeches.

<u>Course Requirements</u>: Speeches will start at three (3) minutes in duration and progress to a final speech of 10 minutes. Class size will determine the number of speeches delivered during the semester.

### **MATHEMATICS**

The Mathematics Department at Saint Bernard School matches a program of study to each individual student.

Incoming freshmen may begin their course of study by taking Geometry or Honors Geometry, provided they have successfully completed an Algebra I course in Grade 8 and scored well on the entrance exam and the Saint Bernard School Algebra I placement test (administered in May). Students entering their sophomore year who are interested in science, engineering, or a math-related field, or who wish to take Calculus in their senior year, may take both Geometry and Algebra II in their sophomore year with the permission of the department. Any student interested in a math-related field should take at least one of the Pre-Calculus courses and, if possible, Calculus. All math courses close after two weeks. Four (4) years of high school mathematics are required for graduation.

# Honors placement is by department permission only. The Mathematics Department establishes benchmarks for honors courses on an annual basis.

**6<sup>TH</sup> GRADE MATHEMATICS (266)** Grade: 6 Duration: 2 semesters <u>Description</u>: This course reinforces basic mathematical concepts, procedures, and vocabulary that will be needed in upper-level algebra and geometry. Topics include the four basic operations, exponents, geometric formulas, algebraic concepts, rations, percentages, signed numbers, fractions, and decimals. Problem solving strategies are also discussed at length.

#### PRE-ALGEBRA (277)

<u>Grade</u>: 7, 8 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 6<sup>th</sup> grade math

<u>Description</u>: This course reinforces arithmetic skills, developing the pre-algebra concepts of variable recognition, signed numbers, formulas, and single variable equations. Students will be introduced to algebraic symbolism, simplifying expressions, solutions to elementary equations, and the graphic representations associated with variables.

#### ALGEBRA IA (214)

<u>Duration</u>: 2 semesters <u>Prerequisite</u>: Completion of Pre-Algebra

<u>Description</u>: Topics will be covered at a slower pace and will include, but are not limited to, the ability to solve and simplify equations, solve and graph inequalities, solve rational equations, solve and graph linear equations.

#### ALGEBRA IB (215)

<u>Duration</u>: 2 semesters <u>Prerequisite</u>: Completion of Integrated Mathematics IA

<u>Description</u>: Topics will be covered at a slower pace and will include, but are not limited to, a review of basic math skills, simple equations and inequalities, graphing, linear equations, and a study of polynomials, and the basics of geometric proof.

#### ALGEBRA I (218, 210)

<u>Duration</u>: 2 semesters <u>Levels</u>: Advanced, Honors <u>Prerequisite</u>:

- Advanced: Pre-Algebra
- Honors: 88 or higher in Pre-Algebra and instructor's permission

<u>Description</u>: Algebra I is taught as part of a three-year integrated mathematics course. Though algebra is the focus, topics from geometry, probability, and statistics will also be covered when appropriate. Topics covered include functions, systems of equations, exponential and radical functions, data analysis, fundamentals of geometry, graphs of functions, and reasoning and proof.

#### **GEOMETRY (232, 230)**

<u>Duration</u>: 2 semesters <u>Levels</u>: Advanced, Honors <u>Prerequisite</u>:

- Advanced: Math I or Math IB
- Honors: 85 or higher in Honors Integrated Mathematics I (or 90 or higher in Integrated Mathematics I and instructor's permission)

<u>Description</u>: Geometry is the second course in our three-course integrated math sequence. While the focus will be on traditional geometry topics such as triangles and quadrilaterals, surface area and volume, and right triangles and trigonometry, topics from algebra in which graphing and interpretation are required will also be addressed.

#### ALGEBRA II (233, 234)

<u>Duration</u>: 2 semesters <u>Levels</u>: Advanced, Honors <u>Prerequisites</u>:

- Advanced: Completion of Integrated Mathematics II
- Honors: 85 or higher in Honors Integrated Mathematics II (or 90 or higher in Integrated Mathematics II with instructor's permission).

<u>Description</u>: Algebra II is the final course in our three-course integrated math sequence Topics covered include rational expressions and functions, radical expressions and functions, exponential and logarithmic functions, sequences and series, applications of geometry, and the basics of trigonometric functions. Students in the Honors course may also see matrices and their applications, trigonometric identities, and the theorems on which algebra is based.

#### ALGEBRA IIA (236)

<u>Duration</u>: 2 semesters <u>Level</u>: Advanced <u>Prerequisite</u>: Completion of Integrated Mathematics II or Integrated Mathematics IIA

<u>Description</u>: Topics will be covered at a slower pace and include rational expressions and functions, radical expressions and functions, exponential and logarithmic functions, sequences and series, and applications of geometry.

#### **PRE-CALCULUS (242, 240)**

<u>Duration</u>: 2 semesters <u>Levels</u>: Advanced, Honors <u>Prerequisite</u>:

- Advanced: Integrated Mathematics III
- Honors: 85 or higher in Honors Integrated Mathematics III (or 90 or higher in Integrated Mathematics III with instructor permission).

<u>Description</u>: After a quick review of Algebra I and II, some of the pre-calculus topics covered are trigonometric functions, solving right and oblique triangles, complex numbers, sequences, series, and an introduction to limits and polar coordinates.

#### **INTRODUCTION TO TRIGONOMETRY (244)**

<u>Duration</u>: 2 semesters <u>Levels</u>: Advanced <u>Prerequisite</u>: Completion of Integrated Mathematics III or Integrated Mathematics IIIA

<u>Description</u>: The course begins with a comprehensive review of topics from the Algebra I, Geometry, and Algebra II followed by a general introduction to the properties and behavior of trigonometric functions.

#### ACCELERATED PRE-CALCULUS

<u>Duration:</u> Four weeks (Summer) <u>Level:</u> Honors <u>Prerequisite:</u> 90 or higher in Honors Algebra II and instructor permission.

<u>Description</u>: This course is an intensive study of all pre-calculus topics, including, but not limited to, trigonometry, complex numbers, sequences and series, and limits. This course is designed for students who have excelled in the early math sequence and wish to take courses more advanced than Calculus while still in high school.

#### CALCULUS I (250)

<u>Duration</u>: 2 semesters <u>Prerequisite</u>: 80 or higher in Pre-Calculus and instructor's permission.

<u>Description</u>: This course presents a brief overview of calculus topics including limits, differentiation, and integration. Upon completion, students will be prepared to take an introductory level college calculus course.

#### AP CALCULUS AB (269)

<u>Duration</u>: 2 semesters <u>Levels</u>:

3/2/17

Prerequisite: 90 or higher in Honors Pre-Calculus and instructor's permission.

<u>Description</u>: The course will take an extensive look at both differential and integral calculus. Some of the topics that will be explored are limits, continuity, max-min problems, area under the curve and volumes of solids. AP Calculus AB prepares students for the AP Calculus AB test in May. **A graphing calculator is required.** 

#### CALCULUS BC (268)

<u>Duration</u>: 1 semester <u>Level</u>: AP <u>Prerequisite</u>: 90 or higher in AP Calculus AB and instructor's permission.

<u>Description</u>: Advanced Placement Calculus BC is for the superior math student. This course covers material from both Calculus AB and Calculus BC. In addition to the topics discussed in AP Calculus AB, topics include sequences and series, Taylor/Maclaurin series, and differentiation and integration of parametric, polar, and vector functions. **A graphing calculator is required.** 

# INTRODUCTION TO MULTIVARIABLE CALCULUS AND DIFFERENTIAL EQUATIONS (248)

<u>Duration</u>: 1 semester (Spring) <u>Levels</u>: Honors <u>Prerequisite</u>: 90 or higher in Calculus BC or Accelerated Calculus and instructor's permission.

<u>Description</u>: This course is a continuation of BC Calculus. Topics from that class will be reviewed followed by explanations of the calculus of vector-valued functions, surfaces, partial derivatives, and multiple integrals as well as an overview of differential equations and their applications.

# INTRODUCTION TO RESEARCH IN APPLIED AND COMPUTATIONAL MATHEMATICS (275)

<u>Duration</u>: 2 semesters <u>Level</u>: Honors <u>Prerequisites</u>: Completion of Introduction to Multivariable Calculus and Differential Equations (may be taken concurrently with instructor permission)

<u>Description</u>: This course begins with a summary of the three main areas of pure mathematics: Analysis, Topology, and Abstract Algebra. Students will select a research topic from an extensive online library and will produce a professional research paper by the end of the year on their chosen topic. This course is for students who have demonstrated the highest levels of mathematical achievement.

# **MATHEMATICS ELECTIVES**

NOTE: Elective courses DO NOT satisfy the Mathematics requirement for graduation.

#### PHILOSOPHICAL PROBLEMS IN SPACE AND TIME (252)

<u>Duration</u>: 1 semester (Fall) <u>Prerequisite</u>: Pre-calculus and instructor's permission

<u>Description</u>: The course will begin with an overview of the concepts of space and time, moving into the static and dynamic theories of time as well as temporal asymmetries, the relationship between time and consciousness, and the paradox of time travel. It will then address the nature of space and motion, Newtonian and non-Newtonian ideas of spacetime, and curved space. Finally, the implications of Special and General Relativity will be investigated.

#### **HISTORY AND PHILOSOPHY OF MATHEMATICS (245)**

<u>Duration</u>: 1 semester (Spring) <u>Prerequisite</u>: Pre-calculus and instructor's permission

Description: Several schools of thought about the nature of mathematical reality are analyzed. The course also traces the development of the mathematical concept of infinity from the times of the early Greeks though the medieval period, concluding with current applications of the concept in calculus. Cantor's theory of transfinite mathematics will also be examined. Advanced mathematical concepts such as axiomatic set theory and logic will be introduced as necessary.

#### **STATISTICS (292)**

<u>Duration</u>: 1 semester <u>Prerequisites</u>: Completion of Algebra II

<u>Description</u>: This course is designed to introduce students to the fundamentals of probability and statistics. The course covers the measures of variability, statistical inference, and hypothesis testing.

#### ACCOUNTING (282)

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters

3/2/17

<u>Description</u>: This is an introduction to fundamental accounting concepts and generally accepted accounting principles (G.A.A.P.). Emphasis will be placed on the basic accounting structure, the preparation and interpretation of financial statements, financial accounting and reporting for partnerships and corporations.

<u>Course Requirement</u>: Worksheets, projects, unit tests, and semester exams will be used to assess student progress and evaluate mastery of subject matter covered.

#### **PERSONAL FINANCE (283)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 1 semester

<u>Description</u>: This course is designed to introduce students to the fundamentals of personal finance. The course covers career planning, budgeting and cash-flow management, credit use, planned borrowing, taxes, and managing expenditures and housing.

<u>Course Requirements</u>: Readings from the text, case studies, homework, quizzes, tests, and a semester exam is required.

## **SOCIAL STUDIES**

The Social Studies Department at Saint Bernard School presents a sequential course of study for all students in order to deepen their appreciation of the historical forces which have shaped the world they live. The department's curriculum is structured to allow students to study the roots of Western culture as well as being exposed to the contributions of non-Western civilizations.

By studying the evolution of freedom and democracy in America and the world, the department strives to enable students to think critically and to reason logically as they analyze the forces which have shaped the history of our country and other nations. The department seeks to instill in its students a sense of responsibility to be active, knowledgeable citizens.

Three (3) years of high school Social Studies are required for graduation.

#### **6TH GRADE SOCIAL STUDIES**

<u>Grade</u>: 6 <u>Duration</u>: 2 semesters

<u>Description</u>: 6<sup>th</sup> grade Social Studies focuses on Ancient World History. Topics covered include Prehistory, the Fertile Crescent, Ancient Egypt and Nubia, Ancient India, China, Greece, and Rome, as well as the civilizations of Africa, Asia, and the Americas. Map

reading, climate, and geography will also be covered. A variety of activities including group projects, presentations, and research papers will be completed during the course of the year.

#### **7th GRADE SOCIAL STUDIES**

<u>Grade</u>: 7 <u>Duration</u>: 2 semesters

<u>Description</u>: 7<sup>th</sup> grade Social Studies focuses on American History. Topics included range from early life in America, Revolutionary War, and Civil War, and continue through to Reconstruction, with a focus on the Constitution. Map reading, climate, and geography will also be covered. A variety of activities including group projects, presentations, and research papers will be completed during the course of the year.

<u>Course Requirements</u>: Readings from the text, homework, note taking, quizzes, tests, and semester exams are required. Semester projects may be assigned.

#### **8<sup>TH</sup> GRADE SOCIAL STUDIES**

<u>Grade</u>: 8 <u>Duration</u>: 2 Semesters

<u>Description</u>: 8<sup>th</sup> Grade Social Studies continues to focus on American History. Topics covered begin with Reconstruction and continuing through to the present day, including current events. Map reading, climate, and geography will also be covered. A variety of activities including group projects, presentations, and research papers will be completed during the course of the year.

<u>Course Requirements</u>: Readings from the text, homework, note taking, quizzes, tests, and semester exams are required. Semester projects may be assigned.

#### **HONORS WORLD HISTORY I (310)**

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Departmental approval

<u>Description</u>: This course is an in-depth study of Western Civilization. It focuses on the development of the western world and pays special attention to the cradles of civilization, early Greece and Rome, the Middle Ages, the Renaissance and the Age of Napoleon. Students will be exposed to primary source documents and will be required to analyze and interpret these materials in well-developed essays.

<u>Course Requirements</u>: Students must have a high level of reading comprehension, and be willing to do the extra work demanded in an honors level course. Reading from text, homework, note taking, outside readings, quizzes, tests, and semester exams are required.

#### WORLD HISTORY I (319)

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters

<u>Description</u>: This course is a cultural approach to Western Man. It presents man's needs as determinants of historical events from prehistoric to modern times. The cradles of civilization, early Greece and Rome, the Middle Ages, Renaissance, and Napoleon will be studied.

<u>Course Requirements</u>: Readings from the text, homework, note taking, quizzes tests, and semester exams are required. Semester projects may be assigned.

#### HONORS WORLD HISTORY II

<u>Grade</u>: 10 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Departmental approval <u>Credit</u>: 0.5

<u>Description</u>: This course is a continuation of Honors World History I. The Age of Imperialism and the World Wars will be discussed. In addition, Africa, the Middle East, Latin America, Southeast Asia, and South Asia will be studied. Students will be exposed to primary source documents and will be required to analyze and interpret these materials in well-developed essays.

<u>Course Requirements</u>: Students must have a high level of reading comprehension, and be willing to do the extra work demanded in an honors level course. Reading from text, homework, note taking, outside readings, quizzes, tests, and semester exams are required.

#### WORLD HISTORY II (313)

<u>Grade</u>: 10 <u>Duration</u>: 1 semester

<u>Description</u>: This course is a continuation of World History I. The Age of Imperialism and the World Wars will be discussed. In addition Africa, the Middle East, Asia, Latin America, South East Asia, South Asia, and the collapse of communism will be studied. <u>Course Requirements</u>: Readings from the text, homework, note taking, quizzes, tests, and semester exams are required. Semester projects may be assigned.

#### HONORS UNITED STATES GOVERNMENT AND CIVICS (325)

<u>Grade</u>: 10 <u>Duration</u>: 1 semester

3/2/17

<u>Prerequisite</u>: 90+ average in World History and the approval of <u>both</u> the Freshman English I and World History teacher.

<u>Description</u>: All students at Saint Bernard must take United States history in their Junior Year. However, Sophomores who meet the above requirements, have a genuine interest in American History, are willing to do the extra work, and hope to take the Advanced Placement exam in US History, may choose to take Honors United States Government and Civics in their Sophomore Year. Topics covered in this course include Students will study the foundations of American democracy and the origins of American government as well as the structure of federal and state governments. Emphasis is placed on the Constitution and the rights and responsibilities of citizens in a democratic society. Also explored are the roles of political parties; campaigns and elections; and actions citizens can take to influence public policy decisions.

<u>Course Requirements</u>: Reading from the text, homework, analysis of primary source documents, quizzes, tests, and exams. A summer course assignment book is also required.

#### **UNITED STATES GOVERNMENT AND CIVICS (326)**

<u>Grade</u>: 10 <u>Duration</u>: 1 semester

<u>Description</u>: Students will study the foundations of American democracy and the origins of American government as well as the structure of federal and state governments. Emphasis is placed on the Constitution and the rights and responsibilities of citizens in a democratic society. Also explored are the roles of political parties; campaigns and elections; and actions citizens can take to influence public policy decisions.

<u>Course Requirements</u>: Readings from the text, homework, note taking, take home essays, quizzes, tests, and semester exams.

#### **ADVANCED PLACEMENT UNITED STATES HISTORY (339)**

<u>Grade</u>: 11 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors United States History I or 90+ average in United States History and teacher recommendation.

<u>Description</u>: This course is an in-depth study of American history from Colonization to the end of the Cold War Era. Topics covered include the Revolutionary War/Constitution, the Civil War, Reconstruction, the Age of Industry, Progressive Era, World War I, the Great Depression and the New Deal, World War II, and the Cold War. Students will be required to interpret and analyze primary source material and, at the end of the junior year, are required to take the AP US History Exam.

<u>Course Requirements</u>: Reading college level text, homework, note taking, analysis and interpretation of primary documents, document-based essay questions, online tests, quizzes, tests, and semester exams. A summer course assignment is required. All students are required to take the AP American History exam in May.

#### **UNITED STATES HISTORY II (328)**

<u>Grade</u>: 11 <u>Duration</u>: 2 semesters

<u>Description</u>: United States History II is a required course for all Juniors and concludes the study of American history which began in the Sophomore Year. This course concentrates on the time period from the 1850's-2003. Topics covered include Civil War and Reconstruction, the Age of Industry, the Progressive Era, World War I, the Great Depression and New Deal, World War II, Cold War, Vietnam War, Watergate and all major events leading up to the current presidency.

<u>Course Requirements</u>: Readings from text, homework, note taking, quizzes, tests and semester exams. Homework also includes the reading of three historical books.

#### INTRODUCTION TO AMERICAN HISTORY AND GOVERNMENT

Grade: All International Students

Duration: 1 Semester

<u>Description</u>: This course is only open to international students. It provides students an overview of American history by focusing on important people and events. Students will study democracy, the branches of American government, and modern American politics. They will also examine capitalism and basic principles of Western economics.

<u>Course Requirements</u>: Homework, quizzes, tests, projects, meaningful class participation, mid-term and final exams.

#### INTRODUCTION TO AMERICAN CULTURE AND RELIGION

<u>Grade</u>: All International Students <u>Duration</u>: 1 Semester <u>Credit</u>: .5

<u>Description</u>: This course is only open to international students. It provides students an overview of American culture focusing on Western religion and local history. Students will compare Christianity, Judaism, and Islam, including the distinction between Catholicism and Protestantism. Students will also study school, local, and regional history.

<u>Course Requirements</u>: Homework, quizzes, tests, projects, meaningful class participation, mid-term and final exams.

# SOCIAL STUDIES ELECTIVES

#### **ADVANCED PLACEMENT EUROPEAN HISTORY (330)**

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in AP US History or a 90+ average in US History II and recommendation of Junior year history teacher.

<u>Description</u>: AP European History is an in depth study of European history from the Renaissance to the present time. This course involves the interpretation and analysis of historical documents pertaining to European History. This course concentrates on a wide range of topics beginning with the Renaissance and Reformation, and continuing through the Age of Napoleon, the Industrial Revolution, and finally reaching World War I, the rise of the Dictators, World War II and the Era of the Cold War. The analysis and interpretation of primary source documents and the use of college level text constitute an integral part of the course.

<u>Course Requirements</u>: Reading of text, homework, note taking, quizzes, tests, and semester exam. A summer course assignment required. All students taking this course will be required to take the Advanced Placement exam in May.

#### **PSYCHOLOGY (343)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters

<u>Description</u>: This course is intended to be a general survey of contemporary psychology. The discipline will be approached from a holistic viewpoint using materials currently available in the field. Some topics to be examined are psychology as a science, theories of psychology, sensation, perception, cognition, memory, learning behaviors, and abnormal behavior and personality theories.

<u>Course Requirements</u>: Readings from the text and supplementary materials from which quizzes and tests will be drawn will be required. Written homework from each chapter is also required. The students may elect to do a mouse conditioning project. A semester exam will be required.

## SOCIOLOGY (351)

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters

<u>Description</u>: The course is designed to give the student an understanding of the patterns of recurring social behavior and social change. The student will learn to appreciate the roles

played by age, race, and gender concerning globalization as well as the importance of culture and language in the process of human socialization.

<u>Course Requirement</u>: Class discussion, readings from the text, homework, quizzes, tests, semester exams, and a final project will be offered.

#### **ECONOMICS (360)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Recommendation of present year Social Studies teacher

<u>Description</u>: This course is an introduction to economics. The course examines the overall operation of the American economy and presents the basic concepts of macro/micro economics. Specific units of the course deal with the forms of business, supply and demand, money and banking, the Federal Reserve System, government taxing and spending, the Gross Domestic Product, international trade and related topics.

<u>Course Requiremen</u>t: Reading of text, homework, note taking, quizzes, tests, class discussions and semester exams.

### **SCIENCE**

The Science Department at Saint Bernard School offers courses that introduce students to the concepts, laws and processes of the physical and life sciences. All courses involve lab work. The Science Department matches a program of study that is appropriate for each student.

Some science courses have concurrent mathematics Prerequisite that identify the minimum performance skills used in that course. Students are not allowed to sign up for certain science courses unless the prerequisite math course is completed or is taken concurrently. Please refer to the prerequisite requirements. All science courses close after two weeks of classes.

All high school students attending Saint Bernard School are required to complete three (3) years of Science: 1 year of Biology, 1 year of Chemistry, and 1 year of a science elective. Please refer to the individual Descriptions for Prerequisite.

#### **6<sup>TH</sup> GRADE EARTH SCIENCE** <u>Grade</u>: 6 <u>Duration</u>: 2 semesters

<u>Description</u>: This course presents the core themes of Earth Science. In a series of three books,

Students will delve into topics such as populations, communities, ecosystems, biomes, living resources, land, water and air resources and various sources of natural energy. We will also study plate tectonics, earthquakes, and volcanoes. Students will have an understanding of scientific measurements and the various branches of science, as well as technology and engineering process.

<u>Course Requirements</u>: Homework, quizzes tests, midterm and final exams, lab work and written lab assignments and both in class and take home projects.

#### **7<sup>TH</sup> GRADE LIFE SCIENCE**

<u>Grade</u>: 7 <u>Duration</u>: 2 semesters

<u>Description</u>: This course presents the core themes of Human Biology. In a series of two books, students will delve into the systems of the body and discuss topics such as bones, muscles and skin, food and digestion, the heart, blood and veins, the lungs and respiration, excretion, how the body fights diseases. The nervous, endocrine and reproductive systems are also covered. Students will also study the structure and function or cells, cell processes, how cells use energy as well as DNA and heredity.

<u>Course Requirements</u>: Homework, quizzes tests, midterm and final exams, lab work and written lab assignments, dissections, and both in class and take home projects.

#### **8<sup>TH</sup> GRADE PHYSICAL SCIENCE**

<u>Grade</u>: 8 <u>Duration</u>: 2 semesters

<u>Description</u>: This course presents the core themes of physical science: Physics and Chemistry. During the first semester, students will explore the concepts of force, energy, waves, electricity and magnetism, through a series of three books. During the second semester, students will explore the concepts of matter, structure of the atom and chemical reactions, through a series of two books. Students will develop their problem solving skills and learn how to write a proper lab report.

<u>Course Requirements</u>: Homework, tests, lab work, written lab reports, group projects and individual projects.

#### **HONORS BIOLOGY (420)**

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Students are currently taking Honors Geometry or Honors Algebra I. **Placement is dependent on recommendation of science teacher and/or entrance exam math score.** 

3/2/17

<u>Description</u>: This course presents the core themes of biology: molecular structure, cells, DNA and heredity, evolution and organisms with a strong emphasis on biochemistry. Conceptual understanding of underlying themes is applied throughout the course. Lab work includes dissections.

<u>Course Requirements</u>: Homework, quizzes, tests, semester exams, lab work and written lab assignments and research.

#### BIOLOGY (427)

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters

<u>Description</u>: This course presents a background in biology for the college-bound student. Topics include organization of life on chemical and cellular levels, DNA and heredity, microbiology, ecology and special topics. Lab work includes dissections.

<u>Course Requirements</u>: Homework, quizzes and tests, lab work and written lab reports.

#### **HONORS CHEMISTRY (430)**

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Placement is dependent on the recommendation of the student's previous science teacher.

<u>Description</u>: Honors Chemistry is recommended for anyone interested in a science, engineering, or pre-med career. It is designed to develop analytical and critical thinking. The course covers such topics as the atomic theory, stoichiometry, the periodic table, the gas laws, formulas and equations, equilibrium, acids and bases, oxidation-reduction reactions. This provides adequate preparation for further scientific study. Strong math skills are required.

<u>Course Requirements</u>: Lab work based on concepts presented in class will be performed and lab reports are required. Grades will be based on labs/lab reports, homework, worksheets, quizzes, and unit tests. Scientific calculators are needed. TI-83 series or higher calculators are suggested. A summer assignment with graded questions is part of this course.

CHEMISTRY (437) Grade: 10, 11, 12 Duration: 2 semesters <u>Description</u>: This course is designed to develop analytical and critical thinking. It covers such topics as the atomic theory, the periodic table, formulas and equations, and stoichiometry. If time permits, the gas laws will be investigated. This provides adequate preparation for further scientific study. It is class-oriented, with lectures and laboratory periods. Students are expected to be proficient in math.

<u>Course Requirements</u>: Lab work based on concepts presented in class will be performed and lab reports are required. Grades will be based on the labs/lab reports, homework, worksheets, quizzes, and unit assessments. Scientific calculators would be helpful.

#### **CONCEPTUAL CHEMISTRY (438)**

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 2 semesters

<u>Course Description</u>: This course is an alternative for a traditional chemistry class. The Conceptual Chemistry course is a year-long class designed to introduce all the basic principles and concepts of chemistry, but without a major dependence on math or math skills. The Conceptual Chemistry student will have a basic understanding of the chemistry occurring in their home and in their world. The class is designed for future college students not majoring in science. Chemical vocabulary, ionic bonding, covalent bonding, Lewis Dot Structures, chemical reactions and balancing chemical reactions (stoichiometry) are all included in this class. Chemical topics that are currently in the news will likely show up as part of the curriculum and instruction.

## **SCIENCE ELECTIVES**

#### **CONCEPTUAL PHYSICS (442)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Biology and Chemistry

<u>Description</u>: Students will learn about the fundamentals of physics: energy, forces, momentum, light, sound, electricity, and magnetism. Students will begin to understand how math is used to describe the world around us and appreciate its importance to modern science, engineering, and medicine.

<u>Course Requirement</u>: Reading of text, homework, worksheets, quizzes, tests, semester exams and lab work based on concepts presented in class and written lab assignments.

#### **HONORS PHYSICS (446)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters

3/2/17

<u>Prerequisite</u>: Students must be currently taking or have taken Algebra II and have recommendation of math or science teacher.

<u>Description</u>: This is a math-based physics course for the college-bound student who may be interested in pursuing a career in medicine, engineering, or the sciences. Students must have a thorough understanding of Algebra and Trigonometry. The course covers such topics as motion, force, energy, sound, light and electricity. The program involves class lectures, demonstrations, computer labs and many hands-on labs.

<u>Course Requirements</u>: Lab work based on concepts presented in class will be performed and lab reports are required. Homework, worksheets, quizzes, unit tests and semester exams are used to assess student progress. A *scientific calculator* is required.

#### **FORENSIC SCIENCE (402)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Biology & Chemistry

<u>Description</u>: This course is for students interested in forensic science, chemistry and criminal justice. This will involve collecting evidence and analysis of data using scientific methods learned in Biology and Chemistry classes. This course will be designed to develop the students cognitive skills; skills like working memory, visual processing and logic reasoning that will aid in contributing to academic and occupational success.

<u>Course Requirements</u>: Homework, worksheets, quizzes, tests, semester exam, and lab work based on concepts presented in class, lab reports and possibly case studies.

#### **ADVANCED PLACEMENT BIOLOGY (419)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Permission of the instructor and Honors Biology and Honors Chemistry or Biology and Chemistry. Concurrent or previous enrollment of Anatomy & Physiology is recommended.

<u>Description</u>: The two main goals of AP Biology are to have students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. The primary emphasis of this course is to develop an understanding of concepts rather than memorizing terms and technical details. Essential to this conceptual understanding: an appreciation of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Accordingly, goals are set for percentage coverage of three general areas: molecules and cells, 25%; heredity and evolution, 25%; and organisms and populations, 50%.

<u>Course Requirements</u>: Homework, quizzes, tests and labs are required by the College Board, and individual research. A summer reading assignment on Ecology is required. Contact the AP Biology teacher for details. The AP Biology Exam must be taken in May.

#### **ADVANCED PLACEMENT CHEMISTRY (439)**

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 1 year of Chemistry; placement is based on the recommendation of the student's Chemistry teacher.

<u>Description</u>: This is a second year course in which a more complete and comprehensive study of inorganic chemistry will be examined. Special emphasis will be placed on the quantitative aspects of kinetic theory, gas laws, equilibrium, acid and base theory, thermodynamics/thermochemistry, and oxidation and reduction reactions. This course involves class lectures, demonstrations, and hands-on lab activities. According to AP guidelines, goals are set for coverage of five key general areas: Structure of Matter (20%), States of Matter (20%), Chemical Reactions (35-40%), Descriptive Chemistry (10-15%) and Laboratory Work (5-10%).

<u>Course Requirements</u>: Extensive homework, quizzes, tests and labs are required by the College Board. A scientific calculator (TI-83 or better) is needed. The AP Chemistry Exam must be taken in May. A summer reading assignment is required.

#### **ENVIRONMENTAL SCIENCE (423)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Biology & Chemistry

<u>Description</u>: This course is designed to provide students with an understanding of the principles of ecology and the impact of human actions on the environment. The course covers Earth's land and water, the biosphere, environmental interaction between organisms, ecosystems and their effects on ecological succession, soil and water analysis, human population growth and global climate change.

<u>Course Requirements</u>: Homework, worksheets, quizzes, tests, semester exams and lab work based on concepts presented in class, lab reports and possibly field studies.

#### HONORS ANATOMY AND PHYSIOLOGY (460)

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Biology, 85+ average in Chemistry

<u>Description</u>: This course is a detailed study of the systems of the human body. Anatomical, physiological, cellular and chemical processes of the systems of the body will be covered in

detail. Lab activities correlate with lecture. A cat dissection will be performed along with computer analyses of physiological processes.

<u>Course Requirements</u>: Homework, quizzes and tests, cat dissection/related labs, computer simulated labs, and written assignments.

#### ANATOMY AND PHYSIOLOGY

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Biology and Chemistry

<u>Description</u>: This course is a detailed study of the systems of the human body. Anatomical study and physiological processes of the skeletal, muscular, nervous, circulatory, lymphatic, respiratory, digestive, urinary, endocrine and reproductive systems will be examined. Lab work correlates with lectures. A cat dissection will be performed.

<u>Course Requirements</u>: Homework, quizzes, tests, semester exams, cat dissection, other related labs, computer assignments and written assignments.

#### INTRODUCTION TO ORGANIC CHEMISTRY

<u>Grade</u>: 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Placement must be approved by Chemistry teacher

<u>Description</u>: This class will introduce students to Organic Chemistry, the chemistry of life. Organic molecules contain both carbon and hydrogen. Just as there are millions of different types of living organisms on this planet, there are millions of different organic molecules, each with different chemical and physical properties. Students will learn about the fundamentals of nomenclature, structures, mechanisms and syntheses. This course is suggested for those students going on to study in the science/medical fields. <u>Course Requirements</u>: Lab work based on concepts presented in class will be performed and lab reports will be required. Homework, worksheets, quizzes, unit tests and a semester exam will be used to assess student progress.

# WORLD LANGUAGES DEPARTMENT

Studying the language of another country or society provides many benefits for students in addition to the ability to communicate in another language. As they study the language, they come to understand the way of life, customs, values, and cultures of people from different cultures. Students who study another language also improve their first language skills. They become more aware of the world around them and they learn to appreciate diversity. Language skills also are an asset in a variety of careers.

All high school students attending Saint Bernard School are required to complete a minimum of two (2) years of the **same** language. The only exceptions will be students enrolled in the two-year College Preparation Skills sequence. Some colleges require a three-year sequence of the same language. Students and their families should research these requirements when planning language classes with their guidance counselor. All World Language courses close after two weeks.

#### **EXPLORATORY LANGUAGES (495)**

<u>Grade</u>: 6 <u>Duration</u>: 2 semesters

<u>Description</u>: The Exploring Language course gives sixth-grade students an opportunity to begin communicating in several different language (Latin, French, Spanish) before choosing one language for further study. The course also fosters a global perspective by exposing students to several world languages, the countries where they are spoken, and the people who speak them. In addition, it will heighten students' appreciation and respect for cultural diversity and sharpen their cross-cultural awareness and sensitivity. The course emphasizes the use of topical vocabulary in all three languages, such as cognates, numbers, days of the week, months of the year, the classroom, the body, animals and colors. Short dialogues allow the students to see the words studied in sentences and pronounce them accurately.

<u>Course Requirements:</u> Notebook, folder, pen; daily homework, both written and study will be given.

#### **FRENCH I (559)**

<u>Grade</u>: 9, 10. 11 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Freshmen must score in the top 50<sup>th</sup> percentile on the language arts section of the Placement Exam; 70+ average in the last English course taken.

<u>Description</u>: The goal of this course is to introduce the student to the four basic skills of listening, speaking, reading and writing. Particular stress will be placed on vocabulary acquisition, listening comprehension and speaking. In addition, students will learn grammatical structures necessary for communicating. The culture of the Francophone world will be examined as well.

<u>Course Requirements</u>: Daily homework assignments, both written and study are given to reinforce the material learned in class. Occasional projects, several involving Internet research, are also assigned.

#### **HONORS FRENCH II (560)**

<u>Grade</u>: 9, 10

3/2/17

<u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in French I

<u>Description</u>: This accelerated course proves students with an opportunity to expand upon the basic skills of listening, speaking, reading, and writing. More extensive vocabulary, new verb forms, and more in-depth grammatical structures are studied. Students will be expected to speak more frequently, to write more thoroughly, and to read selections of greater length. Additional cultural topics related to the Francophone world will be examined.

<u>Course Requirements</u>: Daily homework assignments, both written and study, are given to reinforce the material learned in class. Guided and free composition activities are assigned, as well as occasional projects, some involving Internet research.

#### FRENCH II (569)

<u>Grade</u>: 9, 10 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 70+ average in French I Description: French II has as its goal the even

<u>Description</u>: French II has as its goal the expansion of the student's knowledge of the basic skills of listening, speaking, reading, and writing. More extensive vocabulary, new verb forms, and more in-depth grammatical structures are studied. Students will be expected to read longer passages in French. Additional cultural topics related to the Francophone world will be examined.

<u>Course Requirements</u>: Daily homework assignments, both written and study are given to reinforce the material learned in class. Occasional projects, several involving Internet research, are also assigned.

#### **HONORS FRENCH III (570)**

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors French II, or 90+ average in French II

<u>Description</u>: This accelerated course continues to focus on the skills of listening, speaking, reading and writing at a more advanced level and at a quicker pace. Students will be expected to write frequently and at length. Opportunities for more oral and aural activities are included. Studies in French history, literature, art, and music will be integrated to provide a deeper understanding of the French people.

<u>Course Requirements</u>: Homework assignments are given frequently to reinforce the material studied in class and to allow for greater use of the language. Guided and free composition activities are assigned, as well as occasional projects, some involving Internet research.

#### FRENCH III (579)

<u>Grade</u>: 10, 11 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 70+ average in French II

<u>Description</u>: The goal of this course is to enable students to understand, speak, read, and write at a more advanced level. Students will study more in-depth grammatical concepts and more topical vocabulary. Opportunities will be provided to speak and to write more extensively. Studies in French history, literature, art and music will be integrated to provide a deeper understanding of the French people.

<u>Course Requirements</u>: Homework assignments are given frequently to reinforce the material studied in class and to allow for greater use of the language. Projects related to the cultural topics, several of which involve Internet research, are included.

#### **HONORS FRENCH IV (580)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors French III or 90+ average in French III <u>Credit</u>: 1

<u>Description</u>: The goal of this course is three-fold: first, to enhance the student's ability to understand and speak correct fluent French; second, to provide advanced readings about various aspects of contemporary French life; and third, to provide continuity in the study of advanced French grammar and composition. French is spoken as often as possible, and students will explore a variety of ways to express themselves in the French language.

<u>Course Requirements</u>: Frequent readings, phonetic drills, listening exercises, vocabulary study, and free composition are required. Access to the Internet is needed to complete many activities.

SPANISH I-A (510) Grade: 7 Duration: 2 semesters

<u>Description</u>: In this initial course, the students will be introduced to the four basic language skills: listening, speaking, reading and writing. Particular stress will be placed on vocabulary acquisition, listening comprehension, and speaking at the same time. An understanding of other cultures, as well as basic grammar structures, will be taught. Topics to be included : introductions, asking age, calendar, likes and dislikes, family members, needs and interests. Daily homework assignments, both written and study, will be given to reinforce the material learned In class.

<u>Course Requirements:</u> Text, workbook, notebook, writing implements on a daily basis.

#### SPANISH I-B (517)

<u>Grade</u>: 8 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Spanish IA or its equivalent

<u>Description:</u> After a thorough review of the material covered in the seventh grade, the students complete the mastery of most verb patterns in the present tense and are introduced to the preterite (or past) tense. Thematic vocabulary revolves around summer and winter pasttimes, health and illness, cultural actities, clothes shopping, and dining out, while new grammatical structures, such as object pronouns, continue to be added. Creative work, both oral and written, and the use of videos with native speakers, round out the syllabus in this course. Spanish IA and Spanish IB are the equivalent to one year of high school Spanish.

<u>Course Requirements</u>: Text, workbook, notebook, writing implements on a daily basis. Daily homework, both written and study, will be assigned to reinforce the material learned in class.

#### SPANISH I (515)

<u>Grade</u>: 9 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Freshmen must be in the top 50% of Language Arts section of Placement Exam. 70+ average in last English course taken.

<u>Description</u>: In this initial course, the student will be introduced to the four basic language skills: listening, speaking, reading, and writing. Particular stress will be placed on vocabulary acquisition, listening comprehension, and speaking at the same time. An understanding and appreciation of other cultures, as well as necessary grammar structures, will be taught.

<u>Course Requirements</u>: Daily homework assignments, both written and study, to reinforce the material learned in class.

#### **HONORS SPANISH II (520)**

<u>Grade</u>: 9, 10 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Spanish I

<u>Description</u>: This course advances the student's knowledge of the basic skills of listening, speaking, reading, and writing acquired in Spanish I. Additional vocabulary, new verb forms, and more in-depth grammatical structures are studied within the course.

<u>Course Requirements</u>: Regular homework assignments are required. Students will be expected to read more complex selections in the Spanish language. Writing skills will be improved with greater emphasis on grammar and vocabulary.

#### SPANISH II (525)

<u>Grade</u>: 9, 10, 11 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 70+ average in Spanish I

<u>Description</u>: This course provides an opportunity to expand the student's knowledge of the basic skills of listening, speaking, reading, and writing acquired in Spanish I. Vocabulary, new verb forms, and more in-depth grammatical structures are studied within the course.

<u>Course Requirements</u>: Regular homework assignments are required. Students will be expected to read longer selections in the Spanish language.

#### HONORS SPANISH III (530)

<u>Grade</u>: 10, 11 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors Spanish II, or 90+ average in Spanish II and teacher recommendation.

<u>Description</u>: Honors Spanish III provides an intensive presentation, review, and practice of the important grammar topics necessary to build the student's language skills. As this is a Pre-AP class, the material covered provides an excellent method of practice to familiarize students with different sources of authentic cultural material

A variety of vocabulary, grammar, reading, writing, listening, and speaking skills are included. Topics, such as sports, art, music, literature, politics, economy, environment, industry, social issues, and more will be presented. Students will expand their ability to identify, comprehend, summarize, and support reading or listening material from authentic sources. Students will be asked to give their own opinion about different topics which will give them the opportunity to practice and improve their skills. They are encouraged to read newspapers and magazines, and to listen to radio programs from different Spanish-speaking countries and regions.

<u>Course Requirements</u>: Daily homework assignments. Students are responsible to study after class and review the information. Writing activities will include essays with specific themes that students will have to prepare periodically.

#### SPANISH III (535)

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 2 semesters

#### Prerequisite: 70+ average in Spanish II

<u>Description</u>: Spanish III provides an opportunity to keep building the student's language skills through the acquisition of more complex grammar structures and new vocabulary. Different sources are used to engage students with authentic cultural material. Vocabulary, grammar, reading, writing, listening and speaking skills are included. Students will be asked to give their own opinion about different topics which will give them the opportunity to practice and improve their skills.

<u>Course Requirements</u>: Homework assignments are given daily to reinforce the material. Students are responsible to study after class and review grammar structures and vocabulary.

#### **HONORS SPANISH IV (540)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Honors Spanish III or 90+ average in Spanish III and teacher recommendation

<u>Description</u>: Honors Spanish IV provides the opportunity to review and learn the most complex Spanish language structures to develop language proficiency. Emphasis will be placed on the use of the language skills (listening, speaking, reading, and writing) within the three modes of communication. As this is a Pre-AP class, the students will familiarize themselves with authentic cultural material. They will expand their ability to identify, comprehend, summarize, and support reading or listening material as well as improve the use of the language that is semantically accurate according to a given context. They will present information or persuasive arguments on general topics with grammatical control and good pronunciation.

<u>Course Requirements</u>: Material covered in class will be followed by daily homework assignments to help students with the practice of the different topics. Review of grammar structures and active participation in class are required. Quizzes and tests will be given to assess the student's improvement.

#### ADVANCED PLACEMENT SPANISH V: LANGUAGE & CULTURE (550)

<u>Grade</u>: 12

Duration: 2 semesters

<u>Prerequisite</u>: Teacher recommendation

<u>Description</u>: This course is conducted completely in Spanish. The course is intended to promote language proficiency, cultural awareness and both fluency and accuracy to pursue communication. The three modes of communication - Interpretive, Interpersonal and Presentational - are foundations to the AP Spanish Language and Culture course. Following the guidelines of the College Board AP Spanish Language and Culture course, and providing opportunities for students to demonstrate their proficiency in the modes of

communication, the course provides advanced high school students with a rich and rigorous opportunity to study the language and culture of the Spanish speaking world. The AP Spanish Language and Culture course is structured around six themes and each theme includes contexts for exploration and essential questions to engage students with authentic material and activities. Advanced-range students will develop a strong command of the Spanish language and all students are expected to take the AP Spanish Language and Culture exam. Through the exploration of contemporary and historical culture contexts, the course will expose students to authentic sources, allowing them to be provided with opportunities to demonstrate an understanding of the products, practices and perspectives of the Spanish language and culture. Authentic material will include native speaking styles as well as evidence of cultural perspectives, such as online print, audio, and audiovisual resources, literature, essays, magazine and newspaper articles, to achieve accuracy and fluency for enhanced communication and improvement of student's communicative abilities.

<u>Course Requirements</u>: Daily active participation in speaking, listening and reading. Homework assignments and assessments will be assigned to improve communication skills, cultural knowledge, comprehension and the production of the language as well as the acquisition of new perspectives of cultural appreciation of the student's culture and the Spanish culture. In the variety of assignments, there will be a section dedicated to grammar with the goal of an intense review of all grammar structures. Quizzes and tests will be given to assess student's abilities.

# ENGLISH AS A SECOND LANGUAGE(ESL) (118)

<u>Grades</u>: 7 – 12 <u>Duration</u>: 2 semesters

This course is for non-native speakers and examines English around the world. The focus is on strengthening listening, reading, and speaking skills. Students will engage in class discussions including topics that examine culture and current events through a variety of media. There will be a strong emphasis on oral presentations.

# VISUAL AND PERFORMING ARTS

All students at Saint Bernard School must complete a Fine Arts requirement of one credit in either the Visual or the Performing Arts. Students may elect a four-year sequence in the Visual Arts or Performing Arts in preparation for continued study at the college level. It is strongly recommended that Fine Arts courses be taken sequentially (without skipping a year within the sequence) in order to maintain proficiency and meet portfolio requirements. Exceptions are possible with the permission of the instructor.

The required Visual Arts Department course for <u>all</u> Freshmen is *Fine Arts I*.

# **VISUAL ARTS**

#### **Department Requirements:**

All students in the Visual Arts Department will be graded for their attendance at the Annual Art Exhibit (last Sunday in April), and activities announced in advance. Students must come to class with their textbooks, sketchbook, notebook folder, #2 lead pencil, and eraser. All Visual Arts courses close after two weeks.

#### ART 6 (600)

<u>Grade</u>: 6 <u>Duration</u>: 1 semester

## ART 7 (601)

<u>Grade</u>: 7 <u>Duration</u>: 2 semesters

<u>Description</u>: This course is designed as a foundation course with entry level art projects which may serve for sequential programs for arts education. Areas of importance are a good knowledge of the principles and elements of design and the building of a foundation for the appreciation and awareness of the art of the past and its relationship to today. The prime area of importance is to develop skill, self-discipline and self-expression through an emphasis on drawing. Students may also be introduced to the process of print-making and sculpture, and will be required to assist in all aspects of the Visual Arts Department. Students do not have to think that they have to be good and accomplished to do well in this course. Come with an open mind, attitude and willingness to try their best and they will be surprised at how successful they can be.

<u>Course Requirements</u>: Set of drawing pencils, ebony design pencil, #2 lead pencils, Visual journal (8 ½ x 11" spiraled sketch pad), Pink Pearl eraser, fine point felt tip pen, notebook and folder for all handouts. Second semester students will be required to actively participate in department activities and attend the Annual Art Exhibit and Awards Night (the last Sunday of April).

#### FINE ARTS I (610)

<u>Grade</u>: 8\*, 9, 10, 11, 12 (\*8<sup>th</sup> grade students must have a portfolio review and the recommendation of the teacher and the department.) <u>Duration</u>: 2 semesters

<u>Description</u>: This course is for all students who wish to pursue their art in an entry-level art course for beginners on the high school level. *This course is a prerequisite for all other Art courses.* The course is designed as an underclassmen foundation course with

entry-level art projects, which serves for the sequential arts, programs for Visual Arts majors. Areas of importance are the development of knowledge of the principles and elements of design and the building of a foundation for the appreciation of the art of the past and its relationship to today. The prime area of importance is to develop skill, self-discipline, and self-expression through an emphasis on drawing. Students may also be introduced to the process of printmaking and sculpture, and will be required to actively assist in all aspects of the Visual Arts department. Class participation and classroom critiques are essential.

<u>Course Requirements</u>: Regular daily homework, practice, projects, critiques, quizzes, worksheets, outlines, tests, and written and project exams are used to assess student progress and evaluate mastery of concepts, skills, and subject matter covered. Readings from the text and supplementary materials will be required. Students are required to compile and develop a portfolio of their own artwork, to actively participate with the mounting of work, to set up exhibits and presentations in the school and community, and will be graded accordingly.

Please see Department Requirements.

#### FINE ARTS II (620)

<u>Grade</u>: 9\*, 10, 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 80+ average in Fine Arts I; Portfolio review with Art Department; teacher and department recommendations: \*<sup>0th</sup> grade students must have taken Fine Arts I and

and department recommendations; \*9<sup>th</sup> grade students must have taken Fine Arts I and meet the other course requirements.

<u>Description</u>: This course places emphasis on observational drawing as a skill and means of expression through a variety of media. Prime areas of study are anatomy and portrait sketching. This course is also designed to build a solid foundation of the principles of color and introduce students to the art of painting and calligraphy. Here, more advanced techniques of printmaking and three-dimensional design may be encountered. Portfolio development and review is a vital component of this course.

<u>Course Requirements</u>: Regular daily homework, practice, projects, critiques, quizzes, worksheets, outlines, tests, and written and project semester exams are used to assess student progress and evaluate mastery of concepts, skills, and subject matter covered. Readings from the text and supplementary materials will be required. Students are required to compile and develop a portfolio of their own artwork, to actively participate with the mounting of work, to set up exhibits and presentations in the school and community, and will be graded accordingly. Please see Department Requirements.

#### HONORS FINE ARTS III / FINE ARTS III (631/630)

<u>Grade</u>: 10\*, 11, 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: 85+ average in Fine Arts II; Portfolio review with Art Department; teacher and department recommendation; \*10<sup>th</sup> grade students must also have completed Fine Arts I and Fine Arts II.

<u>Description</u>: The goal of this course is to further develop advanced drawing and design skills and to help each student develop self-motivation work as a means of original personal expression with some creative problem solving through the exploration and use of advanced techniques in observational drawing, painting, sculpture, and printmaking, and to be introduced to commercial art and graphic design. Portfolio preparation and review is a major requirement of this course. The course will provide each student with the opportunity to explore the history of art from the Renaissance to Impressionism. Local museum and exhibit visitation is required. Students must complete an approved outside life drawing course, pre-approved by the Fine Arts II for admission to the Honors level class.

<u>Course Requirements</u>: Regular daily homework, practice, projects, critiques, quizzes, worksheets, outlines, tests, and written and project exams are used to assess student progress and evaluate mastery of concepts, skills and subject matter covered. Readings from the text and supplementary materials will be required. Students are required to be self-motivated, compile and develop a portfolio of their own art work, to actively participate with the mounting of work, to set up exhibits and presentations in the school and community, and will be graded accordingly. Please see Department Requirements.

## **HONORS PORTFOLIO (603)**

<u>Grade</u>: 11 and 12

Duration: 2 semesters

<u>Prerequisite</u>: 85+ average in Fine Arts II and Fine Arts III, Portfolio review of works from previous Fine Art courses with Instructor, Instructor recommendation. <u>Mandatory Summer Work</u>: Must complete 3 art works over the summer. These works must be discussed with and approved by the instructor before summer break. Sketchbook requirements will also be discussed with the student before the summer break.

<u>Description</u>: The Honors Portfolio course is designed for students who are seriously interested in the practical experience of art, who wish to develop mastery in the concept, composition, and execution of their ideas. Honors Portfolio is not based on a written exam; instead students submit portfolios for final evaluations at the end of each marking period. In building the portfolio, students' abilities, as well as their versatility with techniques, problem solving, and ideation, are covered in their development of the Breadth section. Students also develop a body of work for the Concentration section of the portfolio that investigates an idea of personal interest to them. It is **strongly** recommended that all Honors Portfolio students submit an AP Studio Art portfolio in either 2-D Design Portfolio or Drawing Portfolio in early May for possible college credit. All students, whether submitting for *AP credit* or not, will be responsible for 12 Concentration pieces and 12 Breadth pieces for the Honors Portfolio Course grade.

<u>Course Requirements</u>: Students will produce a minimum of 24 works that satisfy the requirements of the Quality, Concentration, and Breadth sections of the AP Studio Art either 2-D Design Portfolio or Drawing Portfolio. Students are required to be self-motivated, to actively participate with the mounting of work, to set-up exhibits and presentations in the school and community, and will be graded accordingly. Please see Department Requirements for further student requirements. Work is evaluated in progress and in the finished state through critiques with the instructor and peers. The AP Studio Art rubric, which is distributed separately, provides the grading criteria. Assessment of student work is based upon original compositions and artistic integrity. The instructor will conduct discussions and assign reading that reflect what constitutes ethical behavior in the making of art.

#### HONORS UCONN ECE BASIC DRAWING (647)

<u>Grade</u>: 11 and 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Fine Arts courses and an Art teacher recommendation

<u>Description</u>: This course is for all serious art students who have demonstrated a strong drawing proficiency and with to pursue their art in a college-level drawing course. Areas of importance are the development of a good knowledge of the elements and principles of drawing and to develop an awareness and understanding of how to construct drawings based on observation. The objective of this course is to develop an understanding that drawing is based on learning to "see" as a visual artist. The student will develop his/her own personal style. The student will continue to experience observational strategies such as perspective, composition, line weight, proportion, and measurement used in describing forms in space. We emphasize the process and *not* the product. We stress drawing, *not* the drawing. Please see Department Requirements. Students must register and pay their registration fee to the University of Connecticut to receive college credit with the successful completion of the course requirements.

<u>Course Requirements</u>: Students will be graded on individual progress and consistency. The grade will also depend upon active participation in class critiques, maintaining a positive, hard-working attitude, performance, and completed homework assignments. Performance is indicated by how successfully the student listens and responds to instruction, suggestions, and criticisms pertaining to his/her work. The student will receive an individual midterm evaluation and grade. A final portfolio will be turned in at the end of the semester. <u>Students must purchase the following supplies:</u>

18" x 24" newsprint pad18" x 24" white drawing padAssorted erasers; kneaded gum, pink pearl

#### **ADVANCED PLACEMENT ART HISTORY (649)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 2 semesters Prerequisite: 80 or above in both History & English and teacher recommendation

<u>Description:</u> This course is designed to provide motivated students with an understanding and enjoyment of architecture, sculpture, painting, and other art forms within historical and cultural contexts. This course will begin with an introduction to the world and work of the artist and then touch upon a rich introduction to non-Western Art and its cultural influences and, finally, trace the major developments in Western Art from the prehistoric through the modern era. Several of the great non-Western cultures (India, China, Japan, Southeast Asia, Oceania and Highland Asia, the world of Islam, Sub-Sahara Africa, Pre-Columbian, and Native American) will be studied. Western cultures to be investigated are the Prehistoric, Ancient Egyptian, Greek and Roman, and Byzantine through the modern era; giving attention to specific eras such as Gothic, Renaissance, Baroque, and the modern era of the "isms". Again, styles in architecture, sculpture, painting, and other art forms will be examined in relation to historical and cultural influences.

<u>Course Requirements</u>: Class participation in discussions relating to chapters, slide presentations and oral critiques are a major part of the student's assessment. There will also be regular homework assignments, quizzes, and tests, conducted regularly during each marking period. Some testing will require visual identifications. There will be one major research paper and presentation on a particular artist to be selected by the student and approved by the instructor. Students will take the Advanced Placement (AP) exam at the end of this course. There is a summer reading requirement: the first four chapters with handouts. Students must pick up these handouts from the teacher before leaving for the summer. Please see Department Requirements.

## **POTTERY STUDIO (608)**

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Fine Arts I

<u>Description</u>: This course can be taken as either introductory or advanced studio. It is a half year course designed to introduce/ reinforce studio pottery techniques. The advanced students are able to experience the potter's wheel and continue to enhance hand-building techniques. The entry level student will be introduced to hand-building and sculptural techniques. Exposure to a variety of ceramic art, both historical and contemporary is emphasized which will enable students of all levels to produce, improve upon, or complete various projects.

<u>Course Requirements</u>: Students are expected to develop the technical skills of building in clay. Students will need an apron, or casual clothes to wear in class. They will practice, produce projects, and perform critiques. Quizzes, worksheets, outlines, tests, and written and project semester exams are used to assess student progress and evaluate the mastery of concepts, skills and subject matter covered. Please see Department Requirements.

#### **POTTERY (609)** <u>Grade</u>: 10, 11, 12 <u>Duration</u>: 2 semesters Prerequisite: Fine Arts I

<u>Description</u>: This course is for the craft-oriented student and will introduce them to basic hand-building techniques of pinch, coil, and slab. Students are taught to throw cylindrical forms on the potter's wheel and to combine techniques to produce functional and sculptural clay pieces. Exposure to a variety of ceramic art, both historical and contemporary, is emphasized. The components of art education (production, criticism, history, and aesthetics) will be the areas of importance in this course.

<u>Course Requirements</u>: Students are expected to develop the technical skills of building in clay. Students will need an apron, or casual clothes to wear in class. Regular daily homework, practice, projects, critiques, quizzes, worksheets, outlines, tests, and written and project semester exams are used to assess student progress and evaluate mastery of concepts, skills, and subject matter covered. Readings from the text and supplementary materials will be required. Students are required to compile and develop a portfolio of their own artwork, to actively participate with the mounting of work, to set up exhibits and presentations in the school and community, and will be graded accordingly. Please see Department Requirements.

#### STUDIO ARTS / 3-DIMENSIONAL ART (643)

<u>Grade</u>: 10, 11, 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Fine Arts I; Teacher recommendation

<u>Description</u>: This is an introductory course designed to teach the four components of a Visual Arts education: production, criticism, history, and aesthetics. Students will be introduced to the importance of learning a visual language, consisting of the elements of art and the principles of design and how the visual language affects the individual's artwork as well as the artwork of others. This course will also develop the students' awareness of the influence of art in the past and its relationship to today's art. Students will be introduced to a variety of media in the creation of 3-D art with a focus on cardboard relief, free-standing forms, clay, assemblage of found objects, and plaster carving. The assignments and studios in this course are intended to develop students' abilities to recognize, understand, appreciate, and manipulate fundamental concepts and materials as related to 3-D art.

<u>Course Requirements</u>: Class participation in discussions and critiques is essential. Mastery of concepts will be evaluated through studio projects, quizzes, critiques (oral and written), and exams conducted regularly during each marking period. Students are required to actively participate with the mounting of work, to set up exhibits and presentations in the school and community. Please see Department Requirements.

# **MUSIC**

High school students may be eligible to earn two honors credits in Music. These credits are offered only to juniors and seniors. One honors class per year is permitted. Choir and Band may not be repeated for honors credit. Students may add Band and/or Choir into their schedules up to two weeks after the start of classes.

#### 6<sup>TH</sup> GRADE GENERAL MUSIC (663)

<u>Grade</u>: 6

#### Duration: 1 semester

<u>Prerequisite</u>: The 6th grade general music curriculum aims to introduce and further musical skills and knowledge through singing, moving, active listening, performing, reading and writing, and composing of music. Lessons will include proper vocal technique, posture, diction, musical notation, solfege, musical terminology, and ukulele. Musical concepts and skills will be covered in a manner that allows for advanced students to both serve as mentors and move ahead at their own pace.

### 7<sup>TH</sup> GRADE GENERAL MUSIC (667)

Grade: 7

## Duration: 1 semester

<u>Prerequisite</u>: The 7<sup>th</sup> grade music curriculum aims to introduce and further musical skills and knowledge through singing, moving, active listening, performing, reading and writing, and composing of music. Lessons will review and apply skills learned in 6<sup>th</sup> grade, such as proper vocal technique, posture, diction, musical notation, solfege, musical terminology, music theory, and ukulele. The ukulele, with the addition of the guitar and African drumming, will be used to reinforce musical concepts and skills and will be covered in a manner that allows for advanced students to both serve as mentors and move ahead at their own pace. Students will also be prepared to participate in our advanced ensembles at the high school level.

#### **CONCERT BAND (675)**

<u>Grades</u>: 8 – 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Students must play a recognized concert band instrument and show proficiency at a level equal to or above the most basic high school repertoire (level 2+).

<u>Description</u>: The curriculum covers musical concepts, skills, and attitudes in line with the National Music Standards set by NAfME, and students will apply these to develop individual instrumental skills and sense of mastery to works performed. Repertoire includes selections from various time periods, composers, and styles, exposing students to varying techniques. Classes will also include basic instrumental technique, music theory, active listening and responding, as well as creating.

<u>Course Requirements</u>: Students must take part in all school concerts and various musical functions. They are responsible for providing and maintaining their own instruments, maintaining a regular practice regimen, and purchasing a Music Theory workbook at the appropriate level for their experience.

#### HONORS BAND (670)

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: At least two years of ensemble experience on a wind or percussion instrument, the recommendation of the Music Director, a mandatory level of proficiency, and a grade of 90 or above in Concert Band.

<u>Description</u>: Designed for those students who have demonstrated the ability to work at the *advanced* level in accordance with the National Standards for Music Education, this course will include all of the objectives offered in Concert Band in addition to in-depth score studies, and the maintenance of a personal journal.

<u>Course Requirements</u>: Students must audition for the Connecticut Music Educators Association adjudicated festival. Students must also keep a personal journal notating practices, performances pieces studied and/or played. Research assignments in pertinent topics may be assigned.

#### **CONCERT CHOIR (680)**

<u>Grades</u>: 8 – 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: Students need not have advanced vocal skills, but must have the desire to improve their vocal instrument and share in the group singing.

<u>Description</u>: The curriculum covers musical concepts, skills, and attitudes in line with the National Music Standards set by NAfME, and students will apply these to develop individual vocal skills and sense of mastery to vocal works performed. Proper vocal technique, vocal care, music literacy skills, sight singing, and singing posture are covered. Repertoire includes selections from various time periods, composers, and styles, exposing students to varying styles. Classes will also include basic music theory, active listening and responding, as well as creating.

<u>Course Requirements</u>: Students must take part in all school concerts and various musical functions. They are responsible for proper of their vocal instrument, maintaining a regular practice regimen, and purchasing a Music Theory workbook at the appropriate level for their experience.

#### **HONORS CHOIR (682)**

<u>Grade</u>: 12 <u>Duration</u>: 2 semesters <u>Prerequisite</u>: At least two years of ensemble experience at the secondary level, 90 or above average in Concert Choir or recommendation of the music director.

<u>Description</u>: Designed for those students who have demonstrated the ability to work at the advanced level in accordance with the National Standards for Music Education. This course will include all of the objectives offered in Concert Choir.

<u>Course Requirements</u>: Students must audition for the Connecticut Music Educators Association and/or the New England Music Festival Association adjudicated festivals. Students must also keep a personal journal notating practices, performances pieces studied and/or played. Research assignments in pertinent topics may be assigned.

# AP MUSIC THEORY (692)

<u>Grades</u>: 11, 12 <u>Duration</u>: 2 semesters

<u>Description</u>: The AP Music Theory course is designed for the musician who is interested in enhancing their music ability through a rigorous study of music theory. The class will enable the student to understand theoretical and historical significance of harmonic structure as it relates to Western music. During the course of the class, students will develop necessary technical skills used in analysis of music both structurally and harmonically. In addition, students will devote a significant amount of time developing their aural capabilities. The class will prepare students for the AP Music Theory examination given in the spring as well as entrance examinations given by Schools of Music for entering freshmen music majors/minors.

# **PHYSICAL EDUCATION AND HEALTH**

Each student is required to earn 1.0 credit in Physical Education and 0.5 credits in Health in order to graduate. Students may earn ¼ credit for each sport season he or she completes (with a maximum of 1 credit earned). Also, students may take either Strength and Conditioning or Nutrition and Exercise to accumulate credit toward the Physical Education requirement. The Health course is the only course that will meet the 0.5 required credits for the Health.

## 21<sup>ST</sup> CENTURY SKILLS (806)

<u>Grade</u>: 6 <u>Duration</u>: 2 Semesters <u>Description</u>: Students will receive grade-appropriate instruction and reinforcement in Technology, Physical Education, and state-mandated Health.

#### 21<sup>ST</sup> CENTURY SKILLS (807)

<u>Grade</u>: 7 <u>Duration</u>: 2 Semesters

<u>Description</u>: Students will receive grade-appropriate instruction and reinforcement in Technology, Physical Education, and state-mandated Health.

#### 21<sup>ST</sup> CENTURY SKILLS (808)

<u>Grade</u>: 8 <u>Duration</u>: 2 Semesters

<u>Description</u>: Students will receive grade-appropriate instruction and reinforcement in Technology, Physical Education, and state-mandated Health.

#### **PHYSICAL EDUCATION (800)**

<u>Grade</u>: 9, 10, 11, 12 <u>Duration</u>: 2 Semesters

<u>Description</u>: Physical Education offers an opportunity to improve total personal fitness. It is concerned with developing the student's total physical and mental well-being allowing participation to the fullest capacity in the work and play of high school life and in the years which lie beyond. The student will be introduced to many activities and sports. The course will facilitate participation in play and a frequent workout, resulting in improved physical fitness.

#### **HEALTH (413)**

<u>Grade</u>: 9, 10, 11, 12 <u>Duration</u>: 1 Semester

<u>Description</u>: This course is designed to provide accurate health information and develop related skills to make positive health choices. Topics include mental health, family/peer relations, alcohol and other drug abuse, violence, abstinence, STIs such as AIDS and Hepatitis, as well as other current health related issues (Ebola, Zika, etc.).

<u>Course Requirements</u>: Daily homework, worksheets, quizzes, unit assessments and department semester exams are used to ascertain a student's progress and evaluate mastery of subject matter covered.

#### **STRENGTH AND CONDITIONING (829)** Grade: 10, 11, 12

3/2/17

<u>Duration:</u> 1 semester <u>Prerequisite</u>: Approval from the Nurse (up-to-date Physical on file)

<u>Description</u>: This is course is designed for students who want to learn more about ways to strengthen and tone their bodies. Students will learn a variety of exercises and techniques to help their body become physically fit and maintain a healthy weight. Students will learn about the importance of stretching and flexibility and the impact poor flexibility has on muscles. Students will be introduced to the weight room and a variety of exercises to increase muscle strength and/or definition. Students will be taught proper lifting techniques, weight training safety, and etiquette. Students will be introduced to plyometrics and its use in sports. Students will be taught different plyometric exercises and the proper progression for introducing plyometrics into a program. Students will also learn the importance of cardiovascular exercise and how it affects the body systems, as well as its importance to maintaining a strong and healthy body. At the conclusion, the students will learn about different career fields they can look into if the subject interests them, as well as how to gain fitness and health for life.

<u>Course Requirements</u>: Students will design and implement their own weight training program to use once the class is completed. This class will include both lecture and laboratory time which will require students to exercise and experiment with different types of exercise.

#### **NUTRITION & EXERCISE (828)**

<u>Grade</u>: 11, 12 <u>Duration</u>: 1 semester <u>Prerequisite</u>: Health and approval from the Nurse (up-to-date physical on file)

<u>Description</u>: This class will further introduce students to the importance of good nutrition beyond what was taught in Health. Students will learn the specific food groups in greater detail, the USDA's guidelines for healthy living, and the affects of food on the human body. Students will learn how different foods affect your body as you exercise. Students will see the affects of good and poor nutrition when it comes to exercise and athletics. Students will learn how exercise affects the body systems including the cardiovascular, nervous, respiratory, skeletal, and muscular systems. Students will gain understanding about the affects of exercise on disease as well as infection and illness, along with its importance to maintain a healthy and strong body. At the conclusion, the students will learn about different career fields they can look into if the subject interests them, as well as how to gain fitness and health for life.

<u>Course Requirements</u>: This class will include both lecture and laboratory time which will require students to exercise and experiment with different types of exercise.

# **TECHNOLOGY**

#### **FUNDAMENTALS OF GAME DESIGN (764)**

<u>Grade</u>: 9, 10, 11, 12 <u>Duration</u>: 1 semester

<u>Description</u>: This course is designed to explore the elements of games from board games to beginning digital games of today, which will enforce the skills of critical thinking, problem solving and collaboration. Students will apply these skills and the elements of gaming to develop their own original games for a variety of platforms: non-digital and digital. No prior programming experience needed.

<u>Course Requirements</u>: The course is project-based and will require the use of a computer and access to online programs. Independent and group projects will be assigned. There is no textbook required for this course. All information, assignments, and work will be done via Google Classroom.

#### **COMPUTER PROJECTS WITH PYTHON (765)**

<u>Grade</u>: 9. 10, 11, 12 <u>Duration</u>: 1 semester

<u>Description</u>: This course is a great starter course for students interested in learning a programing language but have no background in programming. Students will learn the basics of computer programming as they use the python language to code simple computer games and program Raspberry Pi.

<u>Course Requirements</u>: The course is project-based and will require the use of a computer and access to online programs. Independent and group projects will be assigned. There is no textbook required for this course. All information, assignments, and work will be done via Google Classroom.

# **BASICS OF ROBOTICS (766)**

<u>Grade</u>: 9,10,11,12 <u>Duration:</u> 1 semester

<u>Description:</u> Students will explore what qualifies as a robot, variety of robots that exist and artificial intelligence. Students will be creating and learning to program robots to complete different challenges. Lego Mindstorm EV3 will be utilized along with other types of robots.

<u>Course Requirements</u>: The course is project-based and will require the use of a computer and access to online programs. Independent and group projects will be assigned. There is no textbook required for this course. All information, assignments, and work will be done via Google Classroom.

