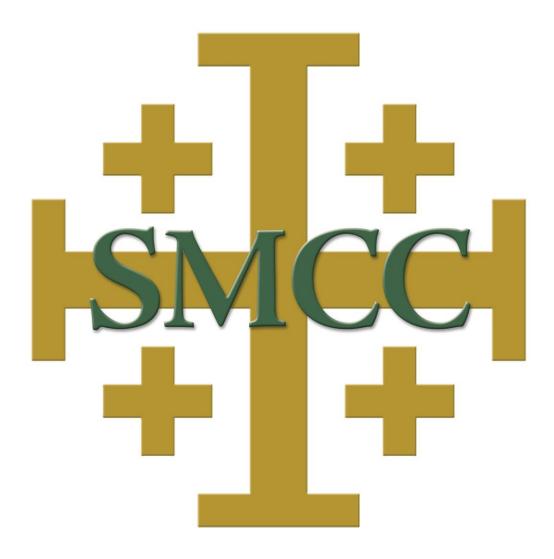
# St. Mary Catholic Central High School 2018-2019 Course Description Handbook



Living Faith, Gaining Knowledge, Serving Others

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# **Graduation Requirements**

Students are expected to take courses required for graduation at SMCC:

Theology 4 credits
English 4 credits
Social Studies 3 credits

Mathematics 4 credits (must include Algebra II)
Science 3 credits (must include Chemistry)
Computers ½ credit of Computer Technology

Fine & Practical Arts 1 credit

Physical Education ½ credit (by class or athletic participation)

Health ½ credit
Modern Language 2 credits

A total 24 credits are required for graduation. Additional graduation requirements include one school sponsored retreat per year and 40 community service hours over four years, as well as a job shadowing experience.

#### **Advanced Placement and Honors Courses**

Advanced Placement and Honors Courses earn an additional 1.00 honor point.

A student's grade point average (GPA) is computed by adding the honor points for each course and dividing that sum by the total number of courses. The GPA is rounded off at one hundredths for the quarter and semester grades. A student's cumulative (career) GPA is computed as described above using only the final semester grades for each semester throughout high school.

The purpose of Advanced Placement classes and an Honors Program is to challenge students to excel in specific disciplines above and beyond the expectations of the regular classroom. Advanced Placement and Honors courses are provided as an option at SMCC for students who exhibit a high ability in a subject and who learn at an accelerated rate. These courses are designed to academically challenge students beyond the standard curriculum. Advanced Placement and Honors courses cover more material at a quicker pace, while challenging students to think and process at a deeper level. Advanced Placement and Honors classes are expected to be demanding, since discussion, homework, class work, and testing is at a greater level of difficulty and complexity. Students are expected to exhibit a higher degree of academic and personal maturity as well as more responsibility for their own learning. Students may choose to take the Advanced Placement Exam in May; students earning a 3, 4, or 5 on an Advanced Placement Exam may qualify for college credit.

# **Administration**

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# **Theology**

938 Sacred Scriptures

Grade level: 9 Credit: .5

(Required)

This course is a one semester course intended to give students general knowledge and appreciation of Sacred Scripture. Through the study of the Bible, the student will come to encounter the Living Word of God, Jesus Christ. They will trace key stages of Salvation History from the Hebrew Scriptures through the Christian Scriptures. This will help the student to grow to know and love Jesus Christ more personally. (Bishops Curriculum, Course #1)

939 The Mystery of Jesus

Grade level: 9 Credit: .5

(Required)

Following the study of Scripture, this freshmen course deepens the study of Jesus, highlighting key events in his earthly ministry. The student will come to understand that Jesus Christ, the living Word of God, the Second person of the Blessed Trinity, is the ultimate Revelation to us from God. Students will learn that the goal of discipleship is a life of grace and holiness and a share of God's everlasting Kingdom. This class encourages a call to action to put their faith into practice through the Church and to become a disciple of our Lord. (Bishops Curriculum, Course #2)

902 The Saga of our Salvation

Grade level: 10 Credit: .5

(Required)

This course is a one semester course intended to help the student understand all that God has done for us through His Son, Jesus Christ. In this course of study, the student will learn that for all eternity, God has planned for us to share eternal happiness with Him, which is accomplished through the redemption that Christ won for us. The student will learn that they share in this redemption only in and through Jesus Christ. The student will be introduced to how God saved us through Jesus, what it means to be a disciple of Christ, and what the life as a disciple entails. (Bishops Curriculum, Course #3)

951 Your Moral Life in Christ

Grade level: 10 Credit: .5

(Required)

This course is intended to help students understand the moral aspects of the Christian life and develop attitudes about morality which help them to make moral decisions based upon their awareness of themselves as human persons, rather than on mere conformity to law. Students learn how to be true to themselves and true to God. (Bishops Curriculum, Course #6)

952 The History and Mission of the Church

Grade level: 11 Credit: .5

(Required)

This is a semester course that is about the Church. It is a course where the Church's mission and history will be covered. This course will help the student understand that in and through the Church they encounter the living Jesus Christ. The student will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by Him through the Holy Spirit. The student will come to know that the Church is the living Body of Christ which has both divine and human elements. The student will learn about the sacred nature of the Church rather than about events in the life of the Church. Additionally, the course will broadly cover the story of Christ's Church, the people of God, through the lives of heroes and saints; how the Church fulfills its mission in every age by teaching, celebrating, and serving God's people. The student will come to appreciate how the Church is the instrument through which Jesus continues to live and be effective in today's world. (Bishops Curriculum, Course #4 and Option B)

# 929 Christian Lifestyles

Grade level: 11 Credit: .5

(Required)

This semester course will provide the students with a greater self-awareness - who God created them to be so they can better discern what God is calling them to do with their lives. They will explore their life goals/mission. And finally, they will be introduced to the Christian Lifestyles to better discern their vocation or calling. With the latter they will explore some difficult sexuality and Church leadership issues including Natural Law, divorce and remarriage, contraception, artificial conception, homosexuality, women priesthood, and mandatory celibacy for clergy. (Bishops Curriculum, Course Option D)

905 Social Justice

Grade level: 12 Credit: .5

(Required)

The Social Justice course challenges students to gain an understanding the Seven Themes of Catholic social justice, to analyze causes of social injustice, to provide charity and to move to the more difficult task of changing systems (political, spiritual, and cultural) which oppress groups of people. Some examples include the study of poverty, economic oppression, discrimination and famine throughout the world and concrete social justice issues of abortion, euthanasia, capital punishment, violence, and warfare. (Bishops Curriculum, Course Option C)

# 953 Prayer in the Church and World

Grade level: 12 Credit: .5

(Elective- must take this course or Living the Scriptures)

The purpose of this course is to help students understand that they can encounter Christ today in a full and real way in and through the sacraments, especially through the Eucharist. Students will examine each of the sacraments so as to learn how they may encounter Christ throughout life. Additionally, the students will understand the manner in which the Catholic Church relates to non-Catholic Christians and other religions of the world. Building on the foundational truth that Jesus Christ established the Catholic Church and entrusted to her the fullness of God's Revelation, the course is intended to help students recognize the ways in which important spiritual truths can also be found in non-Catholic Christian churches, in ecclesial communities, and in non-Christian religions. It is also intended to help them to recognize the ways in which other systems of belief and practice differ from the Catholic faith. (Bishops Curriculum, Course #5 and Option E)

# 918 Living the Scriptures

Grade level:12 Credit: .5

(Elective- Must take this course or Prayer in the Church and World)

This course is designed for those who tend to have stronger faith lives and who are

interested in living the scriptures as they put their faith into practice in their school and parish environment. The Bible will be covered in ways that will enhance their relationships with God. Since it is a course where students put their faith into practice in concrete ways, students are required to have teacher approval for admission to this course. (Bishops Curriculum, Course Option A)

# 954 Catholics & The Media

Grade Level:11-12 Credit: .5

(Elective)

This elective course explores the right-minded relationship that Catholics are called to in respect to the Media. Students will increase their awareness of the media embedded in our modern, American culture and the teachings of the Catholic Church in regard to it. The course will consider many media formats- digital, music, print, social networking, film, television and radio, video games, fashion. Assessment for the course will be based on participation, reflection, and production of various media.

# **Business Education**

103 Computer Technology

155 Summer Computer Technology

Grade Level: 9 Credit: .5

(Required)

A hands-on experiential class in which students will be introduced to the Microsoft Office software package which includes: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, and Microsoft Access. Students will also be required to complete various projects that utilize numerous different online tools and software applications.

### 110 Introduction to Business

Grade Level: 10-12 Credit: .5

(Elective)

This course provides the basic foundation for students who will specialize in some aspect of business in college and will provide an opportunity for non-business majors to explore business relationships and the impact of business in a society in which they are citizens, consumers, and producers. Students will be exposed to a variety of informational sources that guide them in today's business world.

# 118 Business Management

Grade Level: 10-12 Credit: .5

(Elective)

Prerequisites: Passing grade in Introduction to Business or Accounting I Introduction

This course will introduce the students to the basic management functions of a business, and will help students to develop entrepreneurial skills. Students will be exposed to the steps of organizing and managing a small business. The class will also explore money management, the importance of financial goals, and the ways to achieve those goals.

# 128 Digital Art and Advertising

Grade Level: 10-12 Credit: .5

(Elective)

Prerequisites: None

A hands-on experience class with students being introduced to software programs for design and layout. The course will integrate design elements with different advertising techniques and strategies. Students will create projects such as newsletters, flyers, commercials, ad layouts, presentations, and brochures. This course may be taken for a "Fine Art Credit."

# 129 Accounting I Introduction 113 Accounting I Intermediate

Grade Level: 11-12 Credit: 1

(Elective)

Prerequisites: minimum of a 2.66 GPA (Grade 10 with teacher recommendation)

For the college bound student, this course introduces standard accounting concepts. Students learn how to apply accounting procedures through the use of balance sheets, journals, ledgers, and worksheets.

# 139 Computer Programming

Grade Level: 10-12 Credit: .5

(Elective)

Prerequisites: Computer Tech, and a minimum of one semester of Geometry

This class is project based and uses the Visual Basic Studio as its platform. Topics will include studies of data, looping, nested looping, If-Then, While, and For-Next statements. Visual Basic also incorporates the importance of writing code that creates

programs pleasing to the eye. Formatting, the use of arrays and mathematics will also play a large role in the coding process. Most projects are user driven and require the code to be written in a user-friendly manner.

# **English**

200/201 Language Arts 9

Grade Level: 9 Credit: 1

(Required)

Prerequisites: High School Placement Test total combined score for Verbal, Reading and Language less than 105 Intended for students who need reading and comprehension practice, this course studies the short story, young adult novel, poetry, the research writing assignment, and non-fiction. Basic reading and writing, speaking, and study skills are emphasized through the study of literature, vocabulary, grammar, punctuation, spelling, and mechanics.

228/229 Literature & Composition

Grade Level: 9 Credit: 1

(Required)

Developed for students with average reading and comprehension levels, this course teaches students to read and analyze short stories, novels, dramas, poetry, and non-fiction. Short narrative, descriptive, persuasive, and research writing assignments give students an opportunity to demonstrate effective writing, using correct grammar, punctuation, spelling, and usage.

261/262 Honors Literature & Composition

Grade Level: 9 Credit: 1

(Required)

Prerequisites: HSPT Verbal, Reading, and Language total of 255 or above (average of 85<sup>th</sup> percentile)

This course is designed for the incoming freshmen who have the capacity to understand a thematic approach to world literature. Various genres from across the world are analyzed. Group and individual projects, written and oral, are part of the class. The course encompasses a writing format, which includes grammar review, paragraph and composition development, and a research paper.

206/207 Language Arts 10

Grade Level: 10 Credit: 1

(Required)

Designed for students with reading comprehension and writing difficulties, this class reads short selections from American writers, as well as young adult novels and speeches, to illustrate basic literary concepts and to provide models for the development of student writing. Class discussion and student projects, including a short research paper, are an integral part of this course. Course registration must be sanctioned by the teacher.

208/209 American Literature & Composition

Grade Level: 10 Credit: 1

(Required)

Prerequisite: Literature and Composition with a minimum of 85% or completion of Language Arts 9 with a 70%

Designed for students with average reading comprehension and writing skills, this course explores various genres of American literature throughout history. Exercises in vocabulary, grammar, literary analysis, film, and note-taking accompany projects and formal essay assignments, and a short research paper will be required. Cooperative learning and practical thinking skills are an integral part of this course.

210/211 Honors American Literature & Composition

Grade Level: 10 Credit: 1

(Required)

Prerequisites: Minimum 88% in previous Honors English 261 or minimum 90% in English 228 or English teacher recommendation

This is a comprehensive study of American literature presented in chronological fashion. The format includes genres of short story, novel, drama, and non-fiction. Group and individual projects are explored and presented. Students are videotaped during at least one presentation. Writing is emphasized with more intricate development of essays leading to a well-organized research paper.

# 214/215 World Literature & Composition

Grade Level: 11 Credit: 1

(Required)

Designed to acquaint students with the great themes in literature throughout history, this course surveys works from ancient cultures through modern times. Students gain historical perspective and increase awareness of cultural diversity. In addition, this class teaches a variety of essay styles: narrative, descriptive, comparison / contrast, and process. A formal MLA style research paper is also required.

# 218/219 Honors World Literature & Composition

Grade Level: 11 Credit: 1

(Required)

Prerequisites: Minimum 88% in previous Honors English 210 or minimum 90% in English 208 or English teacher recommendation. This is a comprehensive chronological look at world literature. It is a multicultural examination of literature by type and theme. This study begins with myths and man's attempts to understand his place in the world and ends with magical realism and man's attempt to control the world. Appropriate connections are made to architecture, art, geography, music, politics, psychology, religion, and social structure. Requirements include 3-5 novels, an MLA research paper, and individual enrichment presentations.

# 259/260 English Literature & Composition

Grade Level: 12 Credit: 1

(Required)

Designed to introduce students to the major authors of British Literature, assigned reading, class discussion, and library research encourage the exploration of the literary heritage of the English language. This class reinforces previously practiced essay styles. It adds argument and analysis of criticism of literary works and authors. Each student will be required to write a research paper as part of the curriculum.

# 220/221 Advanced Placement English

Grade Level: 12 Credit: 1

(Required)

Prerequisites: English teacher recommendation and minimum 88% in Honors World Literature & Composition

Starting in the summer, students are expected to read a literary classic. A major writing project at the beginning of the school year coupling an analysis and the reading of this classic follows. Students focus on various facets of fiction including novels and short stories. They are expected to interact and critique authors and literature throughout the course. More in depth writing occurs utilizing peer editing as a guide. In the third marking period, students write a well-documented research paper, which is presented orally. An in depth approach to poetry terminology with analysis follows. A major poetry project is part of this section. The last genre is drama, featuring three major plays. Students read, act, and analyze these. Finally, they are expected to write a one-act play, to perform it, and to videotape it. Their studies guide them to appreciate literature and enhance writing skills, so they are able to pass the May AP exam.

230 Creative Writing

Grade Level: 10-12 Credit: .5

(Elective)

This course is intended for the student writer who is interested in learning the techniques for writing poetry and short fiction. Students maintain a journal, compile a personal poetry anthology, and write short narratives.

# **Fine and Practical Arts**

#### 313 Introduction to Art

Grades 9-12 Credit: .5

(Elective) For any student who has not had an art class

This course explores the fundamental concepts of visual art through projects in various two- and three-dimensional media. Students are introduced to the materials, techniques, concepts, and processes essential to understanding the visual arts and the role of the artist. Students will be exposed to popular artists' work. The emphasis is on participation, effort, and visual organization through the Elements of Art.

# 342 Two Dimensional Design I

Grades 9-12 Credit: .5

(Elective)

Pre requisite: Introduction to Art, or Art I Part I

This course introduces the student to the fundamental principles and processes of two-dimensional design and uses a variety of media with an emphasis on problem-solving, craftsmanship, creative exploration and effective use of the language of art. Students will learn basic drawing and painting skills. Students will explore Western Art History.

# 344 Three Dimensional Design I

Grades 9-12 Credit: .5

(Elective)

Pre requisite: None

This course introduces the student to the fundamental principles, processes of three-dimensional design and uses a variety of media with an emphasis on problem-solving, craftsmanship, creative exploration and effective use of the language of art. Students will learn basic ceramics, jewelry, and varied techniques used in 3-dimensional design. Students will explore Western Art History.

# 343 Two Dimensional Design II

Grades 10-12 Credit: .5

(Elective)

Pre requisite: Two-Dimensional Design I or Introduction to Art

This course extends the student experience with more advanced processes of two-dimensional design with a concentration on figurative drawing. Problem-solving, craftsmanship, creative exploration and effective use of the language of art will be emphasized. Students will further their drawing and painting skills. Students will continue their study of Western Art History.

# 345 Three Dimensional Design II

Grades 10-12 Credit: .5

(Elective)

Pre requisite: Three-Dimensional Design I

This course extends the student experience with more advanced processes of three-dimensional design. Problem-solving, craftsmanship, creative exploration and effective use of the language of art will be emphasized. Students will further their experience with ceramics, jewelry, and varied techniques used in 3-dimensional design. Students will be exposed to Non-Western Art History.

# 347 Digital Art and Advertising

Grades 9-12 Credit: .5

(Elective)

Pre requisite: None

Students will be introduced to software programs for design and layout. This course will compare and contrast design elements from both a business and artistic perspective. Students will work with a variety of Adobe Creative Suites, Microsoft, and natural media programs. Students will be exposed to contemporary art.

# 346 Mural Painting

Grades 10-12 Credit: .5

(Elective)

Pre requisite: Two-Dimensional Design I and/or teacher recommendation

This studio art course introduces theoretical and practical aspects of large-scale painting, murals and public art. The course includes an actual practicum in large-scale media and experimentation of early and contemporary techniques including drawing, painting, and various materials. The objective of this course is for students to develop understanding about some of the social roles of art and the impact of murals in communities, based upon its historical and contemporary applications. The course will enable student to control scale, color, specific techniques and safety measures aimed at public spaces. Students will create murals used in for the auction along with other selected projects and opportunities.

# 360/361 Architectural Design

Grade Level: 10-12 Credit: 1

(Elective)

This course will introduce students to basic drafting and architectural design. The goal of this course is for students to have the able to identify and create residential architectural room designs based on good design principles. Students will study American architectural history and several American architects. Students will participate in STEAM (science, technology, engineering, art, and math) activities. Students will study construction technology and will strengthen the relationship of design and technology. The cap stone of the course will be the individual design and creation of a complete set of residential plans on AutoCAD.

# 304/305 Advanced Architectural Design

Grade Level: 11-12 Credit: 1

(Elective)

Prerequisites: Architectural Design and teacher approval

This project based course will allow students an opportunity to further explore architectural design by the study of international architecture and more complex construction techniques. Collaborative learning is the foundation of the curriculum.

# 384/385 Architectural Design Capstone

Grade Level: 12 Credit: 1

(Elective)

Prerequisites: Advanced Architectural Design and teacher recommendation

The capstone is an opportunity for students to complete their Architectural Design studies by addressing a self-selected project that will address practical, real world challenge using the skills and knowledge they have gained throughout their program of

### 350/351 Yearbook I

Grade Level: 9, 10, 11 and 12 Credit: 1

(Elective)

Prerequisites: Minimum GPA of 2.5 and teacher recommendation (for grades 10-12)

Students will work collaboratively to create *The Epoch*, our yearbook. Students will design the layouts, artwork, photography, copy writing, and advertising for that publication. Students should be able to work under the pressure of meeting deadlines. Students will develop time management, planning, design, and sales skills in a collaborative setting. Students are graded on their ability to work with others, to meet deadlines, and sales goals. Students must commit to semesters one and two for consideration to this course.

# 340/341 Yearbook II

Grade Level: 10, 11 and 12 Credit: 1

(Elective)

Prerequisites: Yearbook I and teacher recommendation (for grades 10-12)

# **Modern Languages**

500/501 French I Grade Level: 9-12 Credit: 1

Prerequisites: 9<sup>th</sup> grade– 25<sup>th</sup> percentile on the High School Placement Test or prior language studies at the middle school level This introductory class aims to attain a limited proficiency in the four skills of listening, speaking, reading, and writing within the context of the contemporary French-speaking world. Emphasis is on everyday conversation with a sound foundation in the basics of French grammar. Student participation is an integral part of the class. In addition, students become acquainted with French-speaking

countries and regions.

502/503 French II Credit: 1 Grade Level: 10-12

Prerequisites: French 1 Credit

This course is designed to continue the development of skills introduced in French I and to explore the cultures of the Francophone world. \*\*Transfer students and middle school students with a full year of French level one instruction will be required to take a placement test to determine their proficiency.

504/505 French III Grade Level: 11-12 Credit: 1

Prerequisites: minimum 85% in French II or teacher recommendation

This course aims to increase the student's proficiency at an intermediate level and to expand his/her knowledge of language and culture.

**Honors French IV** 532/533

Grade Level: 12 Credit: 1

Prerequisites: minimum 85% in French III or teacher recommendation

This course encompasses a thorough review, as well as an expanded study of the French language and culture. Speaking, listening, reading, and writing at an advanced level are required.

510/511 Spanish I

Prerequisites: 9<sup>th</sup> grade–25<sup>th</sup> percentile or above on High School Placement Test or prior language studies at the middle school level This introductory class aims to attain a limited proficiency in the four skills of listening, speaking, reading, and writing within the context of the contemporary Spanish-speaking world. Emphasis is on everyday conversation with a sound foundation in the basics of Spanish grammar. Student participation is an integral part of the class. In addition, students become acquainted with Spanishspeaking countries and regions.

512/513 Spanish II Grade Level: 10-12 Credit: 1

Prerequisites: Spanish 1 Credit

This course is designed to continue the development of the skills introduced in Spanish I and to explore the cultures of the Hispanic world. \*\*Transfer students and middle school students with a full year of Spanish level one instruction will be required to take a placement test to determine their proficiency.

514/515 Spanish III Grade Level: 11-12 Credit: 1

Prerequisites: minimum 85% in Spanish II and teacher recommendation

This course aims to increase the student's proficiency at an intermediate level and to expand his/her knowledge of language and culture.

# 534/535 Honors Spanish IV

Grade Level: 12 Credit: 1

Prerequisites: minimum 85% or above in Spanish III and teacher recommendation

This course encompasses a thorough review, as well as an expanded study of the Spanish language and culture. Speaking, listening, reading, and writing at an advanced level are required.

# Math

Please Note: Any student who wishes to take 2 math courses during the same academic year needs approval from both the math department chair and the principal.

# 404/405 Algebra I Concepts A

Grade Level: 9 Credit: 1

Prerequisites: High School Placement Test total score for Quantitative and Math less than 30

Algebra I Concepts A (followed by Algebra I Concepts B) is a standard Algebra I course taught in a two- year sequence. This sequence allows more time to present, explain, and practice the topics, skills, and concepts of Algebra I. Algebra I Concepts A covers the following topics: real numbers, variables, order of operations, properties of real numbers, solving and graphing linear equations, and writing linear equations from given information.

# 406/407 Algebra I Concepts B

Grade Level: 10 Credit: 1

Prerequisites: minimum 70% in Algebra I Concepts A

The second year of this sequence begins with a review of topics from Algebra I Concepts A. The following topics are covered: solving and graphing linear inequalities, absolute value equations and inequalities, solving systems of linear equations, powers, and exponents, solving quadratic equations, polynomials, and factoring.

# 402/403 Algebra I

Grade Level: 9-10 Credit: 1

Prerequisites: High School Placement Test total score for Quantitative and Math more than 30

Algebra I studies the real number system using the four operations and the axioms of the real numbers to simplify numerical and algebraic expressions. Solving equations (linear, quadratic, and cubic) and inequalities, graphing on the number line and the coordinate plane, and solving systems of equations and inequalities are some of the topics studied.

# 410/411 Geometry Concepts

Grade Level: 10-11 Credit: 1

Prerequisites: Minimum 70% in Algebra I Concepts A and Algebra Concepts B and below a 77% average in Algebra I
This course is designed to provide more practice and detailed explanations of the concepts of Geometry. This course examines relationships between points, lines, planes, angles, triangles, and quadrilaterals by using frequent illustrations and examples, but with less emphasis on writing direct proofs to justify these relationships. Algebraic skills are practiced and reviewed.

#### 412/413 Geometry

Grade Level: 10-11 Credit: 1 Prerequisites: minimum 77% average in Algebra I

An introductory unit of elementary logic provides a foundation for the development of Euclidean Geometry. Properties of geometric figures are derived from basic assumptions using deductive reasoning in direct or indirect proofs. Topics studied: triangles, parallel lines, polygons, similarity and congruence, right triangles, and circles. Students are introduced to mathematical proofs and will develop a basic understanding of how to write them. Algebraic concepts and skills are maintained through periodic practice. The intent of the course is to help students learn how to think logically and express themselves precisely.

# 414/415 Honors Geometry

Grade Level: 10 Credit: 1

Prerequisites: Minimum 93% in Algebra I and teacher recommendation

In addition to the objectives of Geometry, Honors Geometry works with more challenging problems and extends the concepts that will be studied. The students are also expected to demonstrate a more complete understanding of proof writing mechanics.

# 420/421 Algebra II Concepts

Grade Level: 11-12 Credit: 1

Prerequisites: Below average of 77% in Algebra I and Geometry or minimum 60% in Algebra I Concepts A&B and Geometry Concepts This course provides a review of Algebra I and in-depth coverage of selected topics of Algebra II. Detailed explanations and extensive practice give students time to absorb these concepts. Some topics covered include: linear and quadratic equations, polynomials, and conic sections.

# 422/423 Algebra II

Grade Level: 10-12 Credit: 1

Prerequisites: Minimum 77% in Algebra I and Geometry or Honors Geometry

Algebra II begins with a review of Algebra I and expands upon the ideas developed in that course with more emphasis on algebraic theory. More complex problems are examined to help students understand concepts and skills. Irrational and complex numbers and quadratic functions are studied in detail.

# 424/425 Honors Algebra II

Grade Level: 10-12 Credit: 1

Prerequisites: Minimum 93% in Algebra I and Geometry or minimum 90% in Honors Geometry

This course is intended to proceed at a faster pace than Algebra II, with students working with more challenging problems and extending the material and concepts of Algebra. Students are expected to demonstrate a more complete understanding of concepts and the mechanics of problem solving.

#### 436/437 Personal Financial Math

Grade Level: 12 Credit: 1
Prerequisites: Minimum 60% in Algebra II Concepts

This course will introduce students to a variety of personal financial skills including units on banking: savings and borrowing, making purchases using credit/debit cards, home mortgages and other types of loans; writing checks and keeping a checkbook; preparing taxes: completing federal and state income tax forms; insurance: purchasing life, home, renter, health and car insurances; budgeting: preparing a personal budget; and preparing for the future by learning about investments such as stocks, bonds, and individual retirement accounts and other investment vehicles.

# 440/441 Precalculus

Grade Level: 12 Credit: 1

Prerequisites: Minimum 77% or above average in Algebra II or Honors Algebra II and Geometry or Honors Geometry and Algebra I Precalculus begins with a review of Algebra II concepts. The course revolves around the use of the Texas Instruments TI-89 titanium graphing calculator, which is used to examine the graphs of functions (polynomial, rational, exponential, logarithmic, and trigonometric), their transformations, combinations, and inverses. Students study the techniques to solve equations (polynomial, exponential, log, rational, radical, and trig). Analytic trigonometry is studied through the use of trig identities, formulas, and equations. Applications are incorporated in each lesson.

#### 442/443 Honors Precalculus

Grade Level: 11-12 Credit: 1

Prerequisites: Minimum 93% in Algebra II or minimum 85% in Honors Algebra II

This course is intended to proceed at a faster pace than Precalculus, with students working with more challenging problems and

extending the material and concepts of Precalculus. Students are expected to demonstrate a more complete understanding of concepts and the mechanics of problem solving.

# 444/445 Advanced Placement Calculus

Grade Level: 12 Credit: 1
Prerequisites: Minimum 80% in Honors Precalculus

AP Calculus reviews the elementary functions (algebraic, trigonometric, exponential, and logarithmic). Limits and continuity are studied. Differential calculus provides procedures for finding derivatives and their applications including velocity, rate of change, related rate, max/min problems, and graphing techniques (curve sketching). Integral calculus introduces techniques for integration and its application to decay, growth, area, and volume.

454 Accounting I Introduction 455 Accounting I Intermediate

Grade Level: 12 Credit: 1 Prerequisites: minimum of a 2.66 GPA (Grade 10 with teacher recommendation)

(Elective)

For the college bound student, this course introduces standard accounting concepts. Students learn how to apply accounting procedures through the use of balance sheets, journals, ledgers, and worksheets.

# 471/472 Statistical Analysis

Grade Level: 12 Credit: 1

Prerequisites: Minimum 70% to 76% average in Algebra II

Statistics will begin with the classification of data. It will continue with the studies of central tendency and variation. The course will include many kinds of graphs including bar, line and histogram graphs. Studies in Probability will be exhaustive ending in probability distributions. This will lead to the different kinds of distributions including Binomial, Normal and Chi-Square. The second semester will contain studies of confidence intervals and hypothesis testing with both one and two samples. The class will close with the study of regression and how we use it to make predictions.

# Music

308/309 Instrumental Music

Grade Level: 9-12 Credit: .5

(Elective)

Prerequisites: Previously played an instrument

An opportunity for students to experience music through participation in chamber music ensembles, jazz combos, and jazz ensembles. Students will be expected to develop and improve individual skills on an instrument of their choice. Course is open to students of all wind and percussion instruments, strings, guitars, and keyboards. Enrollment in this course will require participation in scheduled concerts and community performances.

334/335 Vocal Music

Grade Level: 9-12 Credit: .5

(Elective)

This course is a performance-based study of choral music. Students will learn correct vocal technique, how to project the voice, and be given the opportunity to use these skills at Mass and various performances throughout the year. Literature covered will encompass many genres including sacred, classic choral literature, Broadway, and some popular music. Students will also explore music notation, choral music history, and sigh singing to further their understanding. Members of the choir will also be given various opportunities to perform with small ensembles and as soloists throughout the year. Attendance of required performances is essential for the maintaining of the ensemble quality.

# **Physical Education**

\*\*Students who play two seasons of any SMCC-sponsored sport or sports can apply for a pass/fail Physical Education credit to satisfy the SMCC and State of Michigan graduation requirement. If a student wishes to take PE for a grade, they must take the course at SMCC during the school year.

600 Health Education

Grade Level: 9 Credit: .5

(Required)

This course is designed to promote wellness, health literacy, and positive health behavior in young adults. This course is designed to give students the knowledge and skills they need to live a healthy active lifestyle. Students will participate in various types of activities related to becoming health adults, and their experiences will help determine future health related choices.

605 Physical Education

\*\*Grade Level: 10 Credit: .5

(Required)

This course is designed to use weightlifting to develop a positive mental and physical self along with teaching students how to use weight lifting to become healthy active adults while also teaching students how to play and understand certain lifetime sports and making fitness a lifelong habit.

611 Lifetime Fitness and Wellness

Grade Level: 11-12 Credit: .5

(Elective)

Prerequisites: Physical Education or P.E.

This course is designed to use weightlifting to develop a positive mental and physical self along with teaching students how to play and understand certain lifetime sports. While being able to implement all of these activities into lifelong fitness habits.

# Science

**712/713** Biology Grade Level: 9 Credit: 1

(Required)

This class is required for all incoming freshmen.

This course covers biological concepts such as scientific attitude, scientific inquiry, organization of living systems, interdependence of living systems, cell structure and function, genetics, evolution, biodiversity, and ecology. Laboratory investigations, dissections, and cooperative learning in groups are an integral part of this course.

714/715 Honors Biology

Grade Level: 9 Credit: 1

Prerequisites: Students selected for this class must score in the top percentiles on the science portion of the HSPT and have teacher approval.

This course offers a detailed study of scientific attitude, cells, formation of life, genetics, and evolution at an accelerated pace. Material studied, assignments, and assessments require higher level thinking skills. Scientific research, investigations, and dissections are an integral part of this course.

# 746/747 Coordinated Science

Grade Level: 10 Credit: 1

Prerequisites: Completed Biology <u>and</u> Algebra I, or Algebra Concepts A; all sophomores will take this course in preparation for junior Chemistry (required) and senior Physics.

This course focuses on three primary science topics: Chemistry, Physics, and Earth science. The course is inquiry-based challenging students to solve real-life problems through experimentations and hands-on activities. Topics include: chemical reactions, characteristics of matter, transfer of energy, atomic structure, Newton's laws, interactive forces, magnetism, sound, electricity, atmosphere, geology, and other current Earth science topics.

# 748/749 Honors Coordinated Science

Grade Level: 10 Credit: 1

Prerequisites: <u>Science</u>: 98% in Biology or 95% in Honors Biology; <u>Math</u>: 93% in Algebra I or presently enrolled in Geometry or Honors Geometry.

This course focuses on three primary science topics: Chemistry, Physics, and Earth science. The course is inquiry-based challenging students to solve real-life problems through experimentations and hands-on activities. Topics include: chemical reactions, characteristics of matter, transfer of energy, atomic structure, Newton's laws, interactive forces, magnetism, sound, electricity, atmosphere, geology, and other current Earth science topics. The honors course will incorporate journals, portfolios, experiment logs, and other year-long assessments.

# 722/723 Chemistry I

Grade Level: 11 Credit: 1

Prerequisites: (Required) <u>All Juniors take this course</u>. Completion of Biology, Coordinated Science, and Algebra I or Algebra Concepts B.

This course deals with the major, theoretical generalizations that describe the composition, structure, properties, interactions, interaction mechanisms, and preparations of matter. Topics include: matter and change, the organization of matter, the language of chemistry, phases of matter, solutions, chemical reactions and an introduction to organic chemistry. This course makes extensive use of mathematics and laboratory exercises. It is intended for those students who are college bound and who may pursue a career in science.

#### 724/725 Honors Chemistry I

Grade Level: 11 Credit: 1

Prerequisites: <u>Science</u>: 98% in Coordinated Science or 95% in Honors Coordinated Science. <u>Math</u>: 93% in Algebra I and Geometry or 90% in Honors Algebra I and Honors Geometry.

Honors Chemistry is a rigorous approach to chemistry that is intended for highly motivated college bound students who have a strong math background. This class focuses on the principles and themes of inorganic chemistry: measurements, matter & change, organization of matter, nomenclature, stoichiometry, chemical reactions, solutions, gases, chemical kinetics, thermochemistry, redox, nuclear chemistry, and organic chemistry. Extensive use is made of laboratory experiences. This is a fast paced course which requires students to have strong study skills, testing skills and independent learning skills.

#### 787/788 A.P. Chemistry

Grade Level: 12 Credit: 1

Prerequisites: 95% in Chemistry I or 90% in Honors Chemistry I

This course is designed as a continuation of the basic principles of chemistry. The class will follow the 14 Units of the Advanced Placement Curriculum Framework. Units will include: Chemistry Fundamentals, Types of Chemical Equations, AP Style Net Ionic Equations, Gas Laws, Thermochemistry, Atomic Structure and Periodicity, Chemical Bonding, Liquids, Solids, and Solutions, Kinetics, General Equilibrium, Acids and Bases, Buffers, Ksp, and Titrations, Thermodynamics and Electrochemistry. This is an inquiry based course that will focus on the recommended lab experiences included in the AP Curriculum.

# 732/733

# **Human Anatomy & Physiology**

Grade Level: 11-12 Credit: 1

Prerequisites: 90% in Biology, Coordinated Science, and Chemistry.

This course focuses on human anatomy (structure) and physiology (function). This course offers detailed study of biochemistry, cells, tissues, organs, organ systems, and the functions of each. Labs will give a practical, hands on experience, to include fetal pig dissection. Each chapter will also include a focus on wellness, relating topics to health and medicine. This course is designed for highly motivated students interested in pursuing careers in the Health Sciences, Nursing, Pre-Med, Pre-Dentistry, or other Life Science fields of study.

# 734/735 Honors Human Anatomy & Physiology

Grade Level: 11-12 Credit: 1

 $Prerequisites: 95\% \ in \ Honors \ Biology, \ Honors \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ and \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Science, \ And \ Honors \ Chemistry \ or \ 98\% \ in \ Biology, \ Coordinated \ Honors \ Honors \ Chemistry \ Or \ Honors \$ 

Chemistry.

This honors level course focuses on human anatomy and physiology. Practical labs and medical concepts will be discussed. Fetal pig dissection and simulated human dissection will be incorporated in the last quarter. Bimonthly reports, critical writing, medicinal (pharmacological) concepts, and practical laboratory experiments are an integral part of this course. This course is designed for **highly motivated students** interested in pursuing careers in the Health Sciences, Nursing, Pre-Med, Pre-Dentistry, or other Life Science fields of study.

# **730/731 Physics** *Grade Level: 11–12 Credit: 1*

Prerequisites: 90% in Geometry and enrollment in Algebra II.

This course is designed to offer a basic foundation in classical theoretical physics. It is important in future course work in engineering and other science related fields. Physics deals with the inter-relationships between matter, energy, and force. Mechanics, dynamics, and statics are covered in great depth. Subsequent topics include: wave properties, thermodynamics, sound, and optics. Mathematics and laboratory experiments are an integral part of this course.

# 736/737 Honors Physics

Grade Level: 12 Credit: 1

Prerequisites: 93% in Algebra II or 90% in Honors Algebra II and enrollment Pre-Calculus or higher level math course.

This course is designed to offer a basic foundation in classical theoretical physics. It is important in future course work in engineering and other science related fields. Physics deals with the inter-relationships between matter, energy, and force.

Mechanics, dynamics, and statics are covered in great depth. Subsequent topics include: wave properties, thermodynamics, sound, and optics. Mathematics and laboratory experiments are an integral part of this course. This is a fast paced course which requires students to have strong study skills, testing skills, and independent learning skills.

# **Social Studies**

# 806/807 World History & Geography - Concepts

Grade Level: 10 Credit: 1

(Required)

This course follows world history from ancient times to the modern era studying the changes and continuity over time in peoples, places, and environments. Methods used in the class are basic lecture and discussion, projects, and audio-visual aids. Geography is an integral component of the class. Units are broken down into smaller components to assist student learning.

# 802/803 World History & Geography

Grade Level: 9-10 Credit: 1

(Required)

Prerequisites: If taken in 9<sup>th</sup> grade, 50<sup>th</sup> percentile or above on the High School Placement Test; required course in 10<sup>th</sup> grade
This course follows world history from the ancient times to the modern times studying the changes and continuity over time in

peoples, places, and environments. Methods used in class are basic lecture and discussion, projects and audio-visual aids. Geography is an integral component of the class.

804/805 Honors World History & Geography

Grade Level: 9-10 Credit: 1

(Required)

Prerequisites: High School Placement Test total combined score for Verbal, Reading and Language must be a minimum of 255 This course is intended for the highly motivated student who actively participates in group as well as class discussions. This course follows world history from the ancient times to the modern times studying the changes and continuity over time in peoples, places, and environment. Methods used in class are primarily discussion with some lecture, projects and audio-visual aids. Geography is an integral component of the class.

821/822 US History Concepts

Grade Level: 11 Credit: 1

(Required)

Prerequisites: Concepts World History, Language Arts 9&10, and teacher or counselor recommendation

This is a survey course from 1760 to the present. All major social studies themes are incorporated into units to allow cultural literacy and connections between the past and current events. This course is designed for students who need support with comprehension and study/testing skills.

810/811 United States History

Grade Level: 11 Credit: 1

(Required)

This is a survey course from 1760 to present. All major social studies themes are incorporated into units to allow cultural literacy and connections between the past and current events.

812/813 Advanced Placement United States History

Grade Level: 11 Credit: 1

(Required)

Prerequisites: 3.2 GPA and teacher recommendation

This course is designed for mature, highly motivated students with organizational, time-management and critical thinking skills. This is an introductory college level course from the pre-Columbian era to the present. Critical analysis of primary and secondary sources, charts, maps and graphs are part of each unit. Solid writing skills are required, as well as participation in class discussions and projects. Students may opt to take the AP Board Exam in May for college credit. This challenging course prepares students for college and also fulfills the U.S. History requirement.

**820/821** Economics Grade Level: 12 Credit: .5

(Required)

This course is designed to give students a complete understanding of the economy and their role in it. It includes micro, macro and consumer economics. The EverFi Financial Literacy Program is also part of the course.

830/831 United States Government

Grade Level: 12 Credit: .5

(Required)

This course explores and analyzes the principal components of the American political system. Main topics include: Foundations of Government, the Constitution, Political Parties, Voting, Elections and the role of the Executive, Legislative and Judicial branches in our democracy.

# 831/832 Honors United States Government

Grade Level: 12 Credit: .5

(Required)

Prerequisites: Minimum 90% in U.S. History, and teacher recommendation

This course is designed for students with above average ability and motivation. An in-depth study is made of the foundations of American government, the institutional process of the Presidency, Congress and the Courts, and public policy. Students will be expected to read and take notes independently, take unit tests (rather than chapter tests) and be informed about current events.

#### 808 The World Since 1945

Grade Level: 11-12 Credit: .5

Prerequisites: World History

This is a survey course of world history since the end of World War II to the present day. The course will focus on the major political, economic, social, and cultural developments that have shaped the world from 1945 to the present. Although this is a world history course, special attention will be given to the role of the US in the world events. Topics that will be covered are: the Cold War, the Post-Cold War world, decolonization and post-colonialism. Current events will be highlighted to connect the events of the past to present day issues.

# **840/841** Psychology *Grade Level: 11-12 Credit: .5*

This is an introductory course about the study of human behavior. Students use analytical and critical thinking skills to connect examples to daily life. Students are challenged to test their own beliefs against a body of scientific knowledge, which is useful in solving problems in today's world.

# 889 Introduction to Courts- Concordia University Dual-Enrolled Course

Grade Level: 11-12 Credit: .5

Prerequisites: Minimum G.P.A of 3.2- Approval by Concordia for Dual-Enrolled Status

This dual-enrolled college level course will detail the evolution of the court systems in the United States and why they are structured as they are. Students will be able to describe how each court fits into the overall court systems and how courts systems fit into the criminal justice system. Further, they will be able to know and describe the procedures the courts employ to ensure that constitutional protections are afforded all those who stand before the courts. Finally, student will define the functions of all the individuals who comprise the courthouse, working group (judge, prosecutor, defense attorney, jurors) and describe and analyze the complexity of the United States court system and how individual courts function within those systems and develop the ability to critically analyze various aspects of the court system.

### Online, Dual Credit and College Course Program 2016-2017

SMCC has established an Online, Dual Credit and College Course Program to expand learning opportunities for qualified students to advance their learning, obtain high school and college credit, and assist in the remediation of courses failed. Through a partnership with Edified Online, Michigan Virtual School Monroe County Community College and Concordia University, SMCC now offers these numerous high school and dual credit opportunities. Online courses are designed to supplement SMCC's curriculum and ease scheduling conflicts. Since the curriculum at SMCC provides opportunities for a multi-level college preparatory experience, the following conditions have been set for students enrolling in the Online, Dual Credit and College Course Program:

- The student is required to meet SMCC's requirements for graduation.
- The online course must be substantially different from any similar course offered at SMCC.
- The student's SMCC class schedule and requirements must be given primary consideration in the scheduling of online classes.
- Participation guidelines are established according to the online program. Generally, participation is limited to students with a minimum GPA of 3.2. For programs without a GPA requirement, SMCC has set 3.0 as the necessary GPA. A student may be considered with a lower GPA only with the approval of the Principal. Consideration for remediation of classes will be based on student needs rather than GPA.
- Online course work may not exceed a total of 2 credits per academic year.
- All courses taken must be pre-approved by the student's College Advisor and the Principal at SMCC.
- Families are responsible for payment to the online course provider, unless the need for the course is created by a conflict in the student's schedule.
- There will be no reduction in SMCC tuition for students participating in one of these options
- SMCC students will not leave campus to take these courses, which will be taken in the Media Center under the supervision of SMCC faculty and Staff

#### **Sevenstar Academy**

Through SevenStar Academy, students can take online courses for high school credit in subjects not currently offered as part of SMCC's curriculum or for remediation if a student fails a course. Also, the following Advanced Placement Courses are offered in addition to the AP Courses already offered by SMCC (Calculus AB, US History and AP Literature and Composition):

- •AP Art History AP Macroeconomics (½ year) •AP Biology AP Microeconomics (½ year)
- •AP Computer Science AP World History •AP English Lang & Comp AP U.S. Gov't & Politics (½ year)

#### Michigan Virtual

• Through Michigan Virtual, students have the option to take high school level courses, including AP courses, for free through the State of Michigan. Please see your College Advisor for a List of courses.

#### **Dual Credit Program**

- Edified Online also offers dual credit opportunities through several different institutes of higher education.
- SMCC also offers Dual Credit Courses, as well as courses for college credit only, online from Monroe County Community College. Please see your College Advisor for a list of courses. Courses for Dual Credit that are eligible for reimbursement by the State of Michigan, thus making the course free for SMCC students, are courses that are not a high school graduation requirement and not taught at SMCC.
- SMCC is also partnering with Concordia University for dual credit and college courses. These courses are also free of charge. Please see your college advisor or smccmonroe.com for a list of courses. Students who take dual credit courses through Concordia University and then attend a Concordia University campus for college receive the Concordia Promise Plus Grant, which is a \$150 scholarship for every three credit dual enrolled course taken while in high school.

#### **College Courses**

• University of Detroit Mercy: Juniors and seniors are able to earn college credit by taking business classes at the University of Detroit Mercy. There are limited scholarships available that would cover the cost of tuition. The program is available to seniors who have a 3.25 GPA or higher or juniors who have a 3.5 GPA or higher.

Please contact your college advisor if you are interested in the Online, Dual Credit and College Course Program.

# **NCAA Approved Courses**

#### **ENGLISH**

American Literature and Composition

Honors American Literature and Composition

**Creative Writing** 

AP English

Honors Literature and Composition 9

Language Arts 10 Language Arts 9

Literature and Composition 9
World Literature and Composition

**English Literature and Composition** 

Honors World Literature and Composition

#### **SOCIAL SCIENCE**

**AP US History** 

**Economics** 

Government

**Honors Government** 

Honors World History and Geography

Psychology

**US History** 

Concepts US History

World History and Geography

Concepts World History and Geography

# ADDITIONAL CORE COURSES

French I, II, III, Honors French IV Spanish I, II, III, Honors Spanish IV

#### **MATHEMATICS**

Algebra I Concepts B (.5 credits)

Algebra I Concepts A (.5 credits)

Algebra I Algebra II

Concepts Algebra II

Honors Algebra II

**AP Calculus** 

Geometry

**Concepts Geometry** 

**Honors Geometry** 

**Honors Pre-Calculus** 

**Pre-Calculus** 

Statistics and Probability (.5 credits)

Trigonometry (.5 credits)

**Computer Programming** 

#### NATURAL/PHYSICAL SCIENCE

Anatomy and Physiology

Honors Anatomy and Physiology

Biology

**Honors Biology** 

Chemistry

**Honors Chemistry** 

**AP Chemistry** 

**Coordinated Science** 

**Honors Coordinated Science** 

**Honors Physics** 

Physics