CATHOLIC CENTRAL HIGH SCHOOL

Course Booklet

2021-2022

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GRADUATION REQUIREMENTS

A student is required to have a minimum of 24 units of credit, and to have successfully earned credit in the following subject areas:

SUBJECT	UNITS OF CREDIT
THEOLOGY	4
ENGLISH	4
MATHEMATICS	4
Algebra 1	1 Unit
Geometry	1 Unit
Algebra 2	1 Unit
Additional Math or Math-Related Elective	1 Unit
(1 Math Unit must be in Senior Year)	
SCIENCE	3
Biology	1 Unit
Chemistry	1 Unit
Additional Science Elective	1 Unit
SOCIAL STUDIES	3
World History and Geography	1 Unit
U.S. History and Geography	1 Unit
American Government	½ Unit
Economics	½ Unit
HEALTH AND PHYSICAL EDUCATION	1
CLASSICAL/MODERN LANGUAGE	2
(Both Units in Same Language)	
VISUAL OR PERFORMING ARTS	1
ADDITIONAL ELECTIVES	2
TOTAL REQUIRED UNITS OF CREDIT	**24**

BUSINESS DEPARTMENT

Accounting 1

(Grade 12) ½ Unit Prerequisites: None

This course is the study of the introductory phases of accounting for a sole proprietorship organized as a service business. Students will use up-to-date computerized accounting software to develop an understanding of business operations through the preparations and interpretations of accounting journals ledgers, bank reconciliations, taxes, payroll, and financial statements. Students will receive realistic experience by completing a business simulation throughout the semester.

Accounting 2

(Grade 12) ½ Unit Prerequisites: Accounting 1

Students will continue to develop their skills in accounting through the preparation and interpretations of accounting journals, ledgers, taxes, payroll, and financial statements. Students will be expanding their knowledge in Accounting by completing realistic business simulation organized as a corporation. New concepts will include subsidiary ledgers, specialized journals and distributing dividends.

Business Law

(Grades 11, 12) ½ Unit Prerequisites: None

This course gives the student a basic understanding of both his legal rights and his legal responsibilities under the law. Following an introduction to the law and America's legal system, the student will study topics including civil and criminal procedure; family, juvenile, and consumer law; product liability; warranties and sales; and contract law. The student will develop critical thinking and writing skills and learn to interpret and communicate information by researching and briefing case studies.

Business and Marketing

(Grades 10-12) ½ Unit Prerequisites: None

This course is designed to expose the interested student to the many functions of modern business. The course shows the student how these functions exist in a changing society and the type of decisions that must be made within that environment. The course is also designed to expose the student to the multitude of career fields in the different areas of business. Major topics will include: Marketing Core Standards and the Function of Business, Finance and Accounting, Entrepreneurship, Management and Communication, and Sports and Entertainment Marketing.

Business Mathematics

(Grade 12) ½ Unit Prerequisites: 3 Years of Math

This course addresses the basic needs of all students in providing the skills and knowledge they will need to become effective consumers. Students will practice the computations needed to solve all types of business problems such as personal money management and records, banking transactions, buying for personal/household needs, and personal finance. ***This course is not accepted as a Math credit by the NCAA for athletic eligibility.**

CLASSICAL LANGUAGE DEPARTMENT

LATIN

Latin 1

(Grades 9-12) 1 Unit Prerequisites: None

This is the first course in a sequence of four courses designed to introduce the language, culture, and literature of the ancient Romans. The course is based upon the readings of ancient authors like Cicero, Caesar, and Vergil. This approach is intended to teach the student to read Latin with ease and enjoyment. The course serves as a foundation to the advanced Latin courses as well as a complement to the student's skills in his native English language.

Honors Latin 1

(Grades 9-12) 1 Unit Prerequisites: By selection only

Honors Latin 1 is the beginning of an accelerated and more in-depth study of Latin language and culture. With a faster pace than the standard Latin 1 course, students in Honors Latin 1 will be prepared for taking subsequent Honors Latin courses with the ultimate goal of being prepared to take AP Latin. The student will be responsible for completing additional chapters and assignments to keep in line with the course goals of preparation for AP Latin.

Latin 2

(Grades 10-12) 1 Unit Prerequisites: "C" in the last semester of Latin 1

The course is designed to serve as a continuation of the mastery of Latin forms, syntax, and vocabulary. The readings and assignments become increasingly sophisticated; the student is expected to master by the completion of the second year, most noun and verb inflections. The culture and history of Rome are encountered in greater detail. After the second year the student may be better equipped to learn other Romance languages because of their dependency on the Latin language.

Honors Latin 2

(Grades 10-12) 1 Unit Prerequisites: "B" in the last semester of Honors Latin 1

Honors Latin 2 is the continuation of an accelerated and more in-depth study of Latin language and culture. With a faster pace than the standard Latin 2 course, students in Honors Latin 2 will be prepared for taking subsequent Honors Latin courses. The student will be responsible for completing all the assignments of Latin 2 as well as additional chapters and assignments as necessary. At the end of this course students should have a mastery of all verb and noun forms.

Latin 3

(Grades 11, 12) 1 Unit Prerequisites: "C" in the last semester of Latin 2

This course is a continuation of Latin forms and syntax with an emphasis on readings of advanced difficulty. The students will be expected to review and master the uses of participles, infinitives, gerunds, gerundives, and the verb moods. The student will become acquainted with the cultural and historical influences of Rome through the reading of Latin authors like Ovid, Vergil, Horace, Caesar, and Cicero.

Honors Latin 3

(Grades 11, 12) 1 Unit Prerequisites: "B" in the last semester of Honors Latin 2

This course is designed for the highly motivated student who has maintained an average of "B" or higher in Latin 1 and Latin 2. This course is designed to prepare students for AP Latin the following year. As such the student will be reading the works of Caesar and Vergil in depth. The student will learn how to read and analyze Latin text just as one would read and analyze English literature, with an eye toward comprehension and appreciation.

Latin 4

(Grade 12) 1 Unit Prerequisites: "C" in the last semester of Latin 3

In this course there will be an intensive review of Latin grammar and syntax and then a transition to learning to read longer and more difficult Roman authors. Authors such as Caesar, Cicero, Ovid, Horace, and Vergil will be read throughout the year. Students will need to learn how to analyze and comprehend longer passages of text. Textual and poetical analysis are skills that will be developed over both semesters. The students will learn to have a wider understanding and appreciation of the styles and philosophies of those authors.

Advanced Placement Latin

(Grade 12) 1 Unit Prerequisites: "B" in the last semester of Honors Latin 3

This is an intensive course for the highly motivated student seeking to get college credit by taking the AP Latin test at the end of the year. Reading the *Commentarii de Bello Gallico* by Caesar and the *Aeneid* by Vergil will occur through both semesters. The student will spend much of his time reading and analyzing these texts for comprehension and more importantly thematic meaning. A deep understanding of syntax is required and the student will need to rapidly increase his vocabulary as the year progresses. Testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

COMPUTER AND TECHNOLOGY DEPARTMENT

Keyboarding/Computer Literacy

(Grades 9-12) ½ Unit Prerequisites: None

Through the computer, Keyboarding will introduce the student to the terminology, concepts, and functions of the computer as he develops mastery of the alphabetic and numeric keyboard. An introduction to word processing as a hands-on experience will be covered at the end of the semester. The student will then learn how to format documents in computer-compatible styles, use the automatic features available on the electronic equipment, and process documents that are acceptable in format language using error detection and correction.

Introduction to Robotics

(Grades 9-12) ½ Unit Prerequisites: None

This course is an introduction to the process of designing and controlling robotic systems using prebuilt VEX EDR robots. Students will learn about many of the different sensors and controls used in robotics, along with how and why they work. Students will use these inputs and outputs to create different behaviors by programming the robots using the ROBOTC programming environment. Students will then use these programs to participate in multiple classroom competitions. This course includes elementary concepts of Computer, Electrical, and Mechanical Engineering.

Website Production with Dreamweaver

(Grades 9-12) ½ unit Prerequisites: A working knowledge of computers and Internet browsing.

This course builds on the student's basic computer skills using Adobe Dreamweaver. The student will create websites and web pages within a project- based learning environment while utilizing Dreamweaver software. Some of the projects will be inspired by the student's own interests. The student will learn a variety of skills such as the efficient use of HTML tags, managing graphic images, and creating effective page layouts.

Student News*

(Grades 9-12) ½ Unit Prerequisites: None

This course is designed to provide students with a thorough, hands-on understanding of the process of news production. Students will learn scripting, videography, reporting, anchoring, and video-editing by producing a pre-recorded daily CCTV Newscast. Students will also learn how to work in a time-sensitive, cooperative environment characteristic of the broadcast news industry. Grading is based on hands-on application of broadcasting techniques and concepts, reporting of comprehensive and visually compelling stories, adhering to deadlines, performance, and participation.

Cinema Production 1

(Grades 9-12) ½ Unit Prerequisites: None

This course is designed to provide the student with an understanding of video advertising as well as television and film-making processes. Using the software Adobe Premiere Pro, students will create product commercials, mock newscasts, film genre homages, and short movies as well as compete in film-making competitions. Students will be taught how to develop story ideas, script, design storyboard layouts, frame and light shots, adjust audio tracks, non-linear edit footage, and create multiple effects work (such as green screen) with images and text. Each student will have their hand in the writing, acting, directing and editing process throughout the semester.

Cinema Production 2

(Grades 10-12) ½ Unit Prerequisites: Cinema Production 1

This course is a natural extension of the fundamentals covered in Cinema Production 1. Students will be expected to develop narrative concepts of a more mature and thought provoking nature as well as depicting them in a visual style that reflects their greater experience. Using Adobe Premiere Pro CS6, Adobe After Effects, iMovie, and a variety of stop motion apps, students will work in a variety of group and individual settings that test their ability to plan and create presentations that effectively communicate the assigned project goals. Activities will include (but are not limited to) product advertisement, shot-by-shot recreations, music videos, conceptual filmmaking, film competition submissions and an Independent Student Thesis Short Film. Students will also explore miniature model making, green screen composite shots as well as hand drawn, stop motion paper and model animation and practical effects work. It is expected that portions of this class are completed outside of school hours. This course is designed for the serious film exploration student.

Cinema Production 3 – Thesis Film

(Grades 11, 12) ½ Unit Prerequisites: Cinema Production 2

This Thesis level course of Cinema Production allows the student the greatest freedom to develop, plan, and execute his filmmaking path. The first quarter of the course is devoted to a set of short activities that conclude the student's exploration of camera angle/framing shot understanding, use of multi-layered green screen effects, use of Adobe After Effects, lighting and audio adjustment, and cohesive story telling/narrative structure. Once these are completed to the instructor's satisfaction the student will embark on developing his short independent film which MUST be submitted to the DAFT Michigan Student Film Festival. Other competitions are also available for entry consideration. Students will work closely with the instructor but the creative choices made in their Thesis film will be entirely their own. It is expected that filming be done outside of regular class time and "on location" off school grounds as much as possible. Routine inspection and progress evaluations will be made by the instructor.

Microsoft Office Suite

(Grades 10-12) ½ Unit Prerequisites: None

The student will use the standard version of the Microsoft application software in the classroom. The applications used will include Word, Excel, and PowerPoint.

With Word the student will create letters, memos, Web pages, newsletters and more. Excel will be used to organize and calculate data, track financial data, and create charts and graphs. With PowerPoint the student will learn to create dynamic on-screen presentations.

Introduction to Computer Programming

(Grades 10-12) ½ Unit Prerequisites: "B" in all Math courses

In this course, students are introduced to program design and advanced programming concepts using the Alice Programming Environment. Alice was developed by Carnegie Mellon University as a way of introducing students to programming in a colorful and engaging manner. It is endorsed by the Oracle Corporation (owners and maintainers of the Java programming language) as a first step in a Java programming curriculum. Through the medium of 3D animation, students learn programming techniques and concepts that apply to nearly any modern programming environment. This course may be taken independently, or as a precursor to the AP Computer Science course.

Computer Aided Design (CAD) 1

(Grades 11, 12) ½ Unit Prerequisites: Geometry

This project based course is designed to provide the student with an understanding of computer-aided design and how foundational it is to the world of engineering, manufacturing, and architectural design. Students will initially create 2D designs will transform into 3D designs that increase in complexity throughout the course of the semester. Students will learn about geometric drawings, orthographic projections, and sectional views.

Computer Aided Design (CAD) 2

(Grades 11, 12) ½ Unit Prerequisites: Geometry, CAD 1

This project based course is a continuation of Computer Aided Design 1. Increased emphasis will be placed on the more intricate drawing and blue print details as the student designs grow in complexity. Students will continue to expand their ability to draw orthographic projections, will learn about tolerancing their dimensions, and will have the opportunity to physically build their designs according to their drawing and specifications.

Advanced Placement Computer Science

(Grades 11, 12) 1 Unit Prerequisites: "B" in all Math courses

In Advanced Placement Computer Science, students will learn the equivalent of two semesters of a college-level Computer Science course in preparation for the taking the AP Computer Science A exam. The students will learn how to efficiently write code and programs in the Java programming language, focusing on objects and the object oriented programming paradigm. Students will learn advanced programming concepts such as polymorphism, recursion, and algorithm design and analysis. AP Computer Science may be taken either after taking introduction to Computer Programming or with no prior programming experience. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

ENGLISH DEPARTMENT

The English Department has a Summer Reading Program. Students will be tested on their summer reading on Monday, August 19th. This test will constitute 20% of the 1st quarter grade.

Reading Comprehension and Study Skills

(Grade 9) 1 Unit Prerequisites: Enrollment based on High School Placement Test

This course is designed to build reading and study skills for students to apply on a daily basis. Concepts covered in improving reading comprehension include, for example, using context clues and word parts for understanding vocabulary, identifying main ideas and supporting details, understanding organization, making inferences, and identifying purpose and tone. Studies will also develop effective and efficient study skills to enable the student to become a successful learner. Study skills topics include identification of learning styles, proven study techniques, test-taking strategies, organizational skills, time management, critical thinking skills, exam preparation, and self-development techniques for achieving academic goals. Class size is limited. Students who take Reading Comprehension and Study Skills in summer school may place out of it for the school year.

English 1

(Grade 9) 1 Unit Prerequisites: Enrollment based on High School Placement Test

This English skills course is designed for the ninth grade college-preparatory student. It includes Instruction of exposition, vocabulary, speech, and grammar. The study of literature centers on poetry, short fiction, the novel, and drama.

Honors English 1

(Grade 9) 1 Unit Prerequisites: Enrollment based on High School Placement Test

This advanced English skills course offers in-depth instruction in grammar, writing, speech, and literature, thus presenting an intense intellectual challenge. It demands several out-of-school reading and writing assignments.

English 2

(Grade 10) 1 Unit Prerequisites: Successful completion of English 1

This survey of American literature examines American culture as it is defined through its writers and poets. This course emphasizes composition work with an important stress on grammar, punctuation, and paragraphing. The students increase their understanding of literary forms and are better able to compare and contrast the features of various types of literature. The course correlates composition work with speech, listening, vocabulary, critical thinking, and research skills.

Honors English 2

(Grade 10) 1 Unit Prerequisites: "B" in both semesters of Honors English 1 or "A" in both semesters of English 1 with signed teacher recommendation

This advanced tenth grade course concentrates on an in-depth look at a variety of influential American works demanding creative and critical thinking. The course continues to develop students' skills in reading, grammar, writing, and speaking. It also works on preparation for the PSAT and demands several out-of-school reading and writing projects.

English 3

(Grade 11) 1 Unit Prerequisites: Successful completion of English 2

In this course continued stress will be placed upon composition and grammar skills. A survey of World literature will enable the student to explore world culture and history as it is defined through literature. Attention will be given to the process of writing a research paper. Standardized test taking skills are also stressed.

Advanced Placement English Language and Composition

(Grade 11) 1 Unit Prerequisites: "B" in both semesters of Honors English 2 or "A" in both semesters of English 2 with signed teacher recommendation

AP English Language and Composition is a college level course open to juniors only. It is a continuation in the Honors English sequence and is open to students who have performed well and have a teacher recommendation. Students will have the opportunity to earn both college credit and advanced placement in English while still in high school. The purpose of this course is to help students write effectively and confidently across the curriculum in their college courses and in their professional and personal lives. The course is organized according to the requirements and guidelines of the current *AP English Course Description,* and, therefore, students are expected to read critically, think analytically, and communicate clearly both in writing and speech. An emphasis is placed on rhetorical analysis of nonfiction, preparing students for the Advanced Placement Test at the end of the school year. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

English 4

(Grade 12) 1 Unit Prerequisites: Successful completion of English 3 or A.P. English Language and Composition

This is the Standard English course for those who have successfully completed the junior English program. It trains the student in critical thinking and expression through class discussions, analytical close readings, and expository essays dealing with relevant aspects of the literature covered. It is a survey course of English literature and emphasis is placed on understanding a given piece of writing in its particular cultural context. Included in the course is a study of major literary forms.

Advanced Placement English Literature

(Grade 12) 1 Unit Prerequisites: "B" in both semesters of AP English Language or "A" in both semesters of English 3 with signed teacher recommendation

Advanced Placement English Literature is a college level course that enables students to earn college credit in English while still in high school. Students are readied for the Advanced Placement Test prepared by the College Board through exercises in the close-reading of a variety of texts and through exercises in composition drawn from AP sources. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Newspaper A

(Grades 10-12) ¼ Unit Prerequisites: None

This course introduces students to the basic form of journalistic writing as well as to some of the practical aspects of newspaper production. In a hands-on setting, students meet with the instructor to produce the school newspaper, the *Spectrum*. The staff members analyze examples of journalistic writing and design and write numerous pieces of their own for publication. Assignments include news reporting, sports writing, feature and editorial writing, editing, photojournalism, and layout and design.

Newspaper B

(Grades 10-12) ¼ Unit Prerequisites: None

This course continues the introduction to concepts and styles as well as the development of skills outlined in Newspaper A.

Yearbook

(Grades 10-12) ½ Unit Prerequisites: None

This course explains the publishing process throughout the year. Basic layout, photography, picture composition reporting, and theme development will be covered. Students will be assigned projects in all areas to experience the overall responsibilities of publisher deadlines. Advanced layout and deadlines, within the yearbook process, will be completed. Students will be given the responsibility of initiation through completion of topic areas covered in the yearbook. Photography will be taught as well as the incorporation of advanced graphics into various published media.

Creative Writing

(Grades 11, 12) ½ Unit Prerequisites: None

Creative Writing is a workshop seminar designed to teach the motivated student a variety of strategies and techniques. Poetry is the foundation of the seminar; students will also write flash fiction, short stories, screenwriting, and drama. Such elements as rhyme, meter, dialogue, setting, and point of view will be utilized. Students will constructively critique works and ready those works for submission to various contests and journals.

Humanities and Fine Art Appreciation

(Grades 11, 12) ½ Unit Prerequisites: None

Humanities and Fine Art Appreciation is a seminar designed to expose students to a wide range of mediums and styles of art and music in order to better understand the importance of arts and culture as part of the human experience. Major areas covered will be visual art (mainly painting, sculpture, and photography), opera, music, architecture, and literature. Students will learn how to identify different art movements, eras of music, styles of architecture, and forms of literature. Students will be assessed through their critiques, creations, and projects.

Public Speaking

(Grades 11, 12) ½ Unit Prerequisites: None

This course builds confidence and poise when speaking before a group of people. Included in this course are speeches of self-introduction, persuasion, and exposition. Concentration will focus on posture, gestures, eye contact, and voice quality.

Debate and Forensics

(Grades 9-12) ½ Unit Prerequisites: Willing to participate in a variety of speech activities.

Debate and Forensics will teach students how to express arguments and to defend those positions under direct challenge in a variety of contexts. The class teaches tact, resourcefulness, and the ability to think on one's feet. Additionally, it teaches that ideas must be backed by evidence, not mere conjecture and opinion. Students will learn about critical policy issues, major philosophical concepts, and important moral theories. Additionally, this course is designed to offer direct instruction in the interpretation of literature and public address. Students with diverse interests and skills will take this course because they enjoy performing or enjoy academic competition. Students can expect to learn how to channel natural competitive energy into positive communication strategies and how to prepare a successful competitive speech. Additionally, students will learn from experience how to analyze an audience, dress for success, and present yourself as an articulate speaker. While not required, students will be provided multiple opportunities to engage in interscholastic speech competitions across Michigan and the country. Ninth and tenth graders are doubly welcome to enroll as there are special first-year novice and junior varsity programs for students new to speech activities and because the benefits of participation in speech activities increase over time.

FINE ARTS DEPARTMENT

**** - Courses marked with an asterisk may be used to fulfill your Visual or Performing Arts requirements.***

ART

Students are permitted to enroll in two art classes per semester.

Introduction to Art*

(Grades 9-11) 1 Unit Prerequisites: None

This course aims to develop an understanding of art through basic concepts, techniques, and the use of various materials. Elements of design, such as color and composition, will be introduced. Media such as drawing, painting, sculpture, printmaking, and textile work will be used. Course requirements are fulfilled through the application of concepts to the appropriate project and assignment. All drawing/painting projects require visual models.

Graphic Design 1*

(Grades 9-12) ½ Unit Prerequisites: None

This course introduces the student to the basic skills used in graphic design. Computer and design skills are developed through a series of project-based assignments. Computer software programs such as Adobe Photoshop, Illustrator, and InDesign will be used. Projects include activities such as symbol/logo design, typography, illustration, and photo editing. The emphasis is on designing print materials.

Photoshop*

(Grades 9-12) ½ Unit Prerequisites: None

The Photoshop course introduces students to digital imaging and electronic photographic manipulation. Emphasis is placed on developing strong software and digital imaging skills in conjunction with design and creative skills. To accomplish these goals, students will work through a series of assignments that will reflect professional projects and are applicable to print and screen-based imagery. Students are expected to have computer file management experience prior to the beginning of the course.

Cinema Production 1*

(Grades 9-12) ½ Unit Prerequisites: None

This course is designed to provide the student with an understanding of video advertising as well as television and film-making processes. Using the software Adobe Premiere Pro, students will create product commercials, mock newscasts, film genre homages, and short movies as well as compete in film-making competitions. Students will be taught how to develop story ideas, script, design storyboard layouts, frame and light shots, adjust audio tracks, non-linear edit footage, and create multiple effects work (such as green screen) with images and text. Each student will have their hand in the writing, acting, directing and editing process throughout the semester.

Cinema Production 2*

(Grades 10-12) ½ Unit Prerequisites: Cinema Production 1

This course is a natural extension of the fundamentals covered in Cinema Production 1. Students will be expected to develop narrative concepts of a more mature and thought provoking nature as well as depicting them in a visual style that reflects their greater experience. Using Adobe Premiere Pro CS6, Adobe After Effects, iMovie, and a variety of stop motion apps, students will work in a variety of group and individual settings that test their ability to plan and create presentations that effectively communicate the assigned project goals. Activities will include (but are not limited to) product advertisement, shot-by-shot recreations, music videos, conceptual filmmaking, film competition submissions and an Independent Student Thesis Short Film. Students will also explore miniature model making, green screen composite shots as well as hand drawn, stop motion paper and model animation and practical effects work. It is expected that portions of this class are completed outside of school hours. This course is designed for the serious film exploration student.

Cinema Production 3 – Thesis Film*

(Grades 11, 12) ½ Unit Prerequisites: Cinema Production 2

This Thesis level course of Cinema Production allows the student the greatest freedom to develop, plan, and execute his filmmaking path. The first quarter of the course is devoted to a set of short activities that conclude the student's exploration of camera angle/framing shot understanding, use of multi-layered green screen effects, use of Adobe After Effects, lighting and audio adjustment, and cohesive story telling/narrative structure. Once these are completed to the instructor's satisfaction the student will embark on developing his short independent film which MUST be submitted to the DAFT Michigan Student Film Festival. Other competitions are also available for entry consideration. Students will work closely with the instructor but the creative choices made in their Thesis film will be entirely their own. It is expected that filming be done outside of regular class time and "on location" off school grounds as much as possible. Routine inspection and progress evaluations will be made by the instructor.

Digital Photography*

(Grades 11, 12) ½ Unit Prerequisites: None

This course will teach students the fundamentals of digital photography. Class emphasis and instruction will focus on three basic concepts: composition and design, camera function, and the use of photo editing software. Students will have the ability to go outside the classroom during the school day and shoot assignments; however, the majority of class time will be spent learning the principles of design and the digital software. Classroom instruction concentrates on daily reviews of student work and editing. Students will be required to provide their own cameras.

Ceramics A*

(Grades 11, 12) ½ Unit Prerequisites: None

Ceramics will acquaint students with all hand-built methods of working with clay. Included will be projects involving pinch, coil, and slab techniques of clay construction. Sculptural skills in clay will also be explored. Glazing and decoration of projects will be discussed throughout the course. This course does not meet the prerequisite for entry to Advanced Art.

Ceramics B*

(Grades 11, 12) ½ Unit Prerequisites: "B" in Ceramics A

Further development of the hand-building techniques will be explored. Students will be able to test their skills on the potter's wheel. Emphasis upon more elaborate work will be stressed. This course does not meet the prerequisite for entry to Advanced Art.

Ceramics C*

(Grade 12) ½ Unit Prerequisites: Ceramics A
Ceramics B

This course enhances the student's previous hand-building clay experiences. Kiln firing, loading, and maintenance as well as glaze and construction experimentation will be emphasized. This course does not meet the prerequisite for entry to Advanced Art.

Sculpture*

(Grades 11, 12) ½ Unit Prerequisites Grade 11: "B" in previous Art class
Prerequisites Grade 12: "B" in two previous Art classes

This course is designed to give the serious art student an opportunity to explore 3-dimensional techniques. Sculptures will be created using both additive and subtractive methods. A variety of media will be encouraged.

Introduction to Drawing*

(Grades 10-12) ½ Unit Prerequisites: Introduction to Art

This is a structured course teaching the rudiments of representational drawing. The student is exposed to a variety of drawing problems such as line, value, and texture. Assigned problems are designed to develop technical skill while challenging the imagination.

Introduction to Painting*

(Grades 10-12) ½ Unit Prerequisites: Introduction to Art, Introduction to Drawing

This course is an introduction to the basic materials and techniques of the watercolor and oil mediums. Students will work from original and real life subject matter and learn to stretch a canvas.

Art History

(Grades 11, 12) ½ Unit Prerequisites: None

A comprehensive look at all the major artistic movements of the past and the political and social climates that parallel them. The course will be topical rather than chronological and highlight the progression into modern art.

Advanced Art

These courses are designed to allow the serious, career-minded student the opportunity to develop a body of work that befits his interests and abilities. Specific projects and assignments will be developed to maximize the artistic accomplishments of the individual.

A student enrolled in any advanced class in his senior year must submit a portfolio by the established deadline and said portfolio must meet all designated requirements.

Advanced Art A - First Level*

(Grades 11, 12) ½ Unit Prerequisites: Introduction to Art, Introduction to Drawing, Introduction to Painting

This course places special emphasis on the mastering of traditional techniques such as drawing, painting, or watercolor. Students are required to work from models.

Advanced Art B - Second Level*

(Grades 11, 12) ½ Unit Prerequisites: Introduction to Art, Introduction to Drawing, Introduction to Painting Advanced Art A

This course is designed for the student to build upon those techniques explored in level one. Students are required to work from models.

Advanced Art C - Third Level*

(Grade 12) ½ Unit Prerequisites: Introduction to Art, Introduction to Drawing, Introduction to Painting Advanced Art A & B

Class emphasis will be placed upon a specific area of concentration or medium. Advanced courses are specifically designed for the development of an art portfolio for the student seeking art education beyond high school.

Advanced Art D - Fourth Level*

(Grade 12) ½ Unit Prerequisites: Introduction to Art, Introduction to Drawing, Introduction to Painting Advanced Art A, B & C

Class is designed for students preparing a presentation of an art portfolio. Preparation of all work for exhibition purposes will take place.

Student News*

(Grades 9-12) ½ Unit Prerequisites: None

This course is designed to provide students with a thorough, hands-on understanding of the process of news production. Students will learn scripting, videography, reporting, anchoring, and video-editing by producing a pre-recorded daily CCTV Newscast. Students will also learn how to work in a time-sensitive, cooperative environment characteristic of the broadcast news industry. Grading is based on hands-on application of broadcasting techniques and concepts, reporting of comprehensive and visually compelling stories, adhering to deadlines, performance, and participation.

DRAMA

Introduction to Drama*

(Grades 9-12) ½ Unit Prerequisites: None

This semester course is designed to provide a balanced introduction for the beginning drama student. Students will learn fundamental theater skills through hands-on projects as well as theater terminology and basic production guidelines. No previous experience is required, but students should have an interest in theater and be willing to participate.

MUSIC

Beginning Band*

(Grades 9, 10) 1 Unit Prerequisites: None

Beginning Band requires **no** previous training. The class begins with the elementary concepts of instrument names and note reading. Instruments are available for rental and students progress at their own rate of speed. The program aims to develop individual skills and also an appreciation for group cooperation. More than a third of the marching and symphony band members began playing in the beginning band.

Marching/Concert Band*#

(Grades 9-10) 1 Unit Prerequisites: Previous experience on a band instrument

This is an entry-level band made up primarily of freshmen and sophomores whose members participate in both a concert band and the marching band. These are performing groups and students should have some experience on a band instrument. During the fall, the marching band performs at the home football games. After the marching season ends, the group plays concert band music at the Christmas and spring concerts as well as other performances throughout the year. The music chosen for this group is outstanding literature but less demanding than that of the Symphony Band. Bandsmen are urged to take private lessons on their instruments, and all members are expected to practice a minimum of thirty minutes per day. All bandsmen participate in the Michigan School Band and Orchestra Association's Solo and Ensemble festival.

Marching/Symphonic Band*#

(Grades 9-12) 1 Unit Prerequisites: By audition only

This is the top-level group in the school. These students participate in both a symphony band and the marching band. These are performing groups and membership requires proficiency on a band instrument as shown by audition. During the fall, the marching band performs at the home football games. After the marching season ends, the group plays symphonic music and performs at concerts and festivals throughout the school year. The band plays many styles of music chosen from the best of standard and modern literature. Bandsmen are urged to take private lessons on their instruments, and all members are expected to practice a minimum of thirty minutes per day. All bandsmen participate in the Michigan School Band and Orchestra Association's Solo and Ensemble festivals.

 # The Marching/Concert and Marching/Symphonic Bands combine to form one large marching band in the fall. Both groups participate in any overseas trips the marching band takes.

Jazz Ensemble*

(Grades 9-12) 1 Unit Prerequisites: By audition only

The Stage Band is composed of selected members of the marching/symphonic band class. It is not an open-enrollment course. This group offers training in improvisation and stylistic performance of compositions or whole-band rehearsals before school and when necessary.

Introduction to Music Theory*

(Grades 10-12) ½ Unit Prerequisites: Previous study of vocal or instrumental music fundamentals and the ability to read music

This course is a foundation for those considering the advanced study of music. Keys, scales, chords, harmonic progressions, intervals, keyboard, ear training, and analysis are the areas of emphasis.

World Drumming*

(Grades 10-12) ½ Unit Prerequisites: None

This is a one-semester class exploring the hand drumming traditions (West Africa, the Caribbean, and others) combined with singing, moving, playing other instruments, and creating.

String Orchestra*

(Grades 9-12) 1 Unit Prerequisites: Previous experience on an orchestral string instrument

This is a performing group featuring small group chamber music and string orchestra literature. Students will have the opportunity to perform at the Michigan School Band and Orchestra Association Solo and Ensemble Festivals as well as other concerts. Orchestra students are strongly encouraged to take private lessons.

Vocal Music*

(Grades 9-12) 1 Unit Prerequisites: By audition only; some experience reading music preferred

Vocal Music is a year-long course open to students who are interested in exploring vocal group performance. The ensemble will harmonize in as many parts as the group may successfully perform. Music selections will be mainly liturgical but occasionally secular. During the year, students will sing for all school Masses, an evening Christmas Concert, and an end-of-the year Spring Concert.

HEALTH DEPARTMENT

Physical Education 1

(Grade 9) ½ Unit Prerequisites: None

This course includes physical fitness and block programs, as well as team sports. Individual testing and fitness development will be stressed throughout the course. Health is taken the opposite semester from Physical Education 1.

Beginning Wrestling, Officiating and Weightlifting

(Grade 9) ½ Unit Prerequisites: None

This course is designed to introduce students to the fundamentals of wrestling, weightlifting, and the officiating of matches. This is a more strenuous course than Physical Education. Students will learn the basics of wrestling from the neutral and referee's positions. Instruction will provide students with the knowledge, technique, and confidence to create weightlifting programs for personal use. During this course students will be expected to apply the rules and regulations of wrestling to conduct matches in class.

Health

(Grade 9) ½ Unit Prerequisites: None

This study of health helps students build better attitudes and practices from young manhood to adulthood. The course presents a broad, comprehensive, and properly articulated program of health instruction to help students achieve proper attitudes, knowledge, and constructive behavior for optimal health. Units included are personal health, mental health, social understanding, misuse and abuse of drugs, alcohol, tobacco, and a unit on safety and first aid.

Shamrock Strength and Wellness

(Grades 10-12) ½ Unit Prerequisites: Health and either Physical Education 1 or Beginning Wrestling

This course is designed to provide students with the means to become a healthier individual and to gain the skills and confidence to live a life proficient in making educated decisions regarding their physical health. Additionally, the course will allow students the opportunity to participate in vigorous activity during the school day in order to improve brain function and their ability to learn. The student will learn how to improve their wellness and develop a healthy lifestyle by gaining an understanding of interval training and how to monitor heart rate. Traditional and nontraditional resistance exercises as well as motor development activities will be used as the fitness components to this course. Students will also be instructed in a classroom setting on the importance of nutrition and healthy eating habits, how to effectively set nutrition and fitness goals using the S.M.A.R.T. method, and the basics of exercise physiology.

MATHEMATICS DEPARTMENT

Algebra 1

(Grade 9) 1 Unit Prerequisites: Enrollment based on High School Placement Test

This college-preparatory course lays the groundwork for the study of all future math and science courses. It reviews the basic properties and operations of the real numbers and concentrates on the techniques of solving 1st- and 2nd-degree equations and inequalities. It also includes the application of equations to problem solving, graphing polynomials, and analyzing lines in a plane.

Honors Advanced Algebra 2

(Grade 9) 1 Unit Prerequisites: Enrollment based on High School Placement Test or Advanced Math Placement Test

This course does a fast-paced review of Algebra 1 and then covers the entire Algebra 2 course. Topics covered include, but are not limited to, the following: complex numbers, polynomial functions, logarithmic functions, exponential functions, advanced graphing, advanced equation solving, advanced applications, matrices, sequences and series, conic sections, advanced probability and statistics. A graphing calculator is required for the second semester. The TI-84 is recommended.

Plane Geometry

(Grades 9, 10) 1 Unit Prerequisites Grade 9: Departmental permission
Prerequisites Grade 10: Algebra 1

This is a complete college-preparatory course in two-dimensional geometry, complemented by three-dimensional solids. It is designed to make the student reason, think, draw accurate diagrams, and apply geometry. Concepts of space geometry are integrated with plane geometry throughout the course. Students are required to supply reasons for proofs in two-column format. Topics include properties of quadrilaterals, irrational expressions, ratio and proportion, slope, distance formula, equation of circle, parallel and perpendicular lines, and coordinate proofs.

Honors Plane Geometry/Trigonometry

(Grade 10) 1 unit Prerequisites: "B-" in Honors Advanced Algebra

Honors Plane Geometry/Trigonometry is a challenging course that covers plane geometry and trigonometry in the same year. In geometry, students will cover advanced topics in two-dimensional and three-dimensional geometry. Students will develop logical and deductive reasoning skills by providing informal and formal justifications. A two-column proof format will be used. The trigonometry portion of the class will cover the circular and triangular trigonometric functions and their graphs. Students will focus on periodic properties, identities, and solving trigonometric equations. A graphing calculator is required for this class. The TI-84 is recommended.

Students successful in Honors Plane Geometry/Trigonometry will advance to Honors Precalculus. In their senior year they would be eligible to take Calculus, a college-level course.

Algebra 2

(Grades 10-12) 1 Unit Prerequisites: "C" in Algebra 1 and departmental permission

This college-preparatory course is designed to enrich and enhance the concepts learned in College Prep and Academic Algebra 1. This course entails a study of polynomials, rational, irrational and complex expressions, as well as polynomial, exponential and logarithmic functions, and the quadratic relations. The number system is expanded to include complex numbers, and greater emphasis is placed on solving problems. Students will be required to have a graphing calculator for a deeper understanding of functions.

Honors Precalculus

(Grade 11) 1 Unit Prerequisites: "B-" in Honors Plane Geometry/Trigonometry and departmental permission

This is a challenging course in analytic geometry, vector algebra, polynomial, exponential and logarithmic functions, and extensive trigonometric applications. Other topics necessary for college mathematics are included, such as sequences and series, mathematical induction, quadratic relations, transformations in a plane, and selected calculus topics. Successful completion of this course enables the students to take Advanced Placement Calculus BC, a two-semester Calculus course, as seniors.

College Algebra, Statistics and Trigonometry

(Grade 12) 1 Unit Prerequisites: Algebra 2 and departmental permission

College Algebra, Statistics and Trigonometry is a college-prep course designed to extend and enhance the concepts of polynomial, exponential, and logarithmic functions previously learned in Algebra 2. Students use a graphing calculator to study functions, explore relationships between equations and their graphs, and generate and analyze data. Statistical concepts are integrated throughout the course when applicable. Trigonometry is presented to provide a standard Precalculus background in trigonometric and circular functions.

Precalculus

(Grades 11, 12) 1 Unit Prerequisites: Algebra 2 and departmental permission

The topics covered in this college-preparatory course include mathematical induction, analytic geometry, vector algebra, sequences and series, quadratic relations, transformations in a plane, and trigonometry with some applications. The course directly prepares for college calculus.

Calculus

(Grade 12) 1 Unit Prerequisites: Precalculus and departmental permission

This course will review concepts of Precalculus, with an emphasis on logarithmic and trigonometric functions. The course will then begin study of limits, derivatives, and integrals. Applications of these concepts are also introduced. The purpose of this course is to acquaint the students with basic Calculus concepts and to make those topics familiar to those students planning to take Calculus I in college. It has been observed that most students taking Calculus I at the university level have been exposed to these concepts at the secondary level. This course prepares students for success in Calculus I.

Advanced Placement Calculus AB

(Grade 12) 1 Unit Prerequisites: "A" in Precalculus or a B- in Honors Precalculus & departmental permission

This is a college course covering elementary functions (algebraic, trigonometric, exponential, and logarithmic), limits of functions without proof, the derivative and some applications (curve sketching, extreme values, related rates), integral calculus including basic techniques of integration (substitution, by parts), and applications to area between curves and solids of revolution.

Note: The student takes the AB Advanced Placement Exam. Most universities offer college credit. Since the scope of the course is considerably less than that of Calculus BC, less college credit can be expected. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Advanced Placement Calculus BC

(Grade 12) 1 Unit Prerequisites: Honors Precalculus and departmental permission

This is a comprehensive course covering limits, differentiation of trigonometric, exponential, and logarithmic functions. Other topics include applications involving area, volume, and arc length. The second semester introduces various topics such as sequences and series, tests for convergence/divergence, area using polar coordinates and differential equations. Topics introduced in this class will be typically those covered in Calculus I and Calculus II college classes.

Note: Students take the AP Calculus BC Exam to evaluate understanding of the concepts. Successful completion of this exam allows the student to earn up to 8 college credits, depending on his test score and the university he is planning to attend. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Advanced Placement Statistics

(Grades 11, 12) 1 Unit Prerequisites Grade 11: Taken concurrently with Honors Precalculus or Precalculus with a "B" in Honors Geometry/Trigonometry and departmental permission

Prerequisites Grade 12: "A" in Algebra 2 and departmental permission

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four conceptual themes covered: Exploring Data, Sampling and Experimentation, Anticipating Patterns, and Statistical Inference. Upon completion of the course, students will take the AP Statistics Examination to earn college credit. A graphing calculator is required for this course. The TI-84 is recommended. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

MODERN LANGUAGE DEPARTMENT

FRENCH

French 1

(Grades 9-11) 1 Unit Prerequisites: None

This introductory course is designed to expose students to the language and cultures of the French-speaking world. Students will develop basic proficiency in the four modalities of language learning: listening, speaking, reading, and writing. In highly structured and contextualized situations, students will learn to ask and answer simple questions as they learn to communicate about themselves, their families, and their friends. Students will respond to oral and written prompts about their daily lives and responsibilities. There is a strong emphasis on vocabulary acquisition and verb conjugation at this level. Students will be exposed to authentic material and various media sources in the target language. French will be used as much as possible during classroom instruction. All first-year students will participate in the National French Contest Exam in semester 2.

Honors French 1

(Grades 9, 10) 1 Unit Prerequisites: By selection only

Honors French 1 is the beginning of an accelerated study of French language and culture. With a faster pace than the standard French 1 course, students in Honors French will begin preparation for taking the Advanced Placement Examination in their final year of study. In March the students will participate in the National French Contest.

French 2

(Grades 10-12) 1 Unit Prerequisites: "C" in the last semester of French 1

French 2 begins with a solid review of the essential structural features and vocabulary introduced in French 1. Basic language skills are deepened. New material is introduced gradually and incorporated into what has been previously learned. Self-expression in speaking and writing becomes more and more prominent. The use of a video program which accompanies the text will lend authenticity and interest to what is being studied. Listening and speaking skills will be developed constantly through the use of the CD program which accompanies the text. Cultural materials will be an integral part of the learning process, with supplementary materials being drawn from online sources, music, films, etc.

Honors French 2

(Grades 10, 11) 1 Unit Prerequisites: "B" in the last semester of Honors French 1

Honors French 2 is an accelerated course for the highly motivated student. In the classroom there will be total immersion as the students rapidly review the structures, vocabulary, and culture they acquired in the previous year. Throughout the year, there will be a strong emphasis on a real acquisition of the basic skills of communication. Oral and written practice should be part of each night's homework. The course will be rapid and intense, but enjoyable. Students will be encouraged to be very creative in their skit presentations and essays. They will be encouraged to read copiously, not only from the literature in the text, but also from French magazines and the Internet. French videos and films will be used regularly to increase oral comprehension skills. In Semester 2, the students will participate in the National French Contest.

French 3

(Grades 11, 12) 1 Unit Prerequisites: "C" in the last semester of French 2

French 3 is an upper-level course intended for the serious language student. Communication goals are common to French 1 and French 2, but the skill level and vocabulary mastery are expected to increase considerably. By the end of the third-year course, students can expect to converse fluently in most basic situations, to write coherently on numerous topics, and to read basic French literature with ease and enjoyment. All basic structures, tenses, and moods will have been introduced. CDs, videos, music, and films will be used to develop skills and deepen interest.

Honors French 3

(Grades 11, 12) 1 Unit Prerequisites: "B" in the last semester of Honors French 2

This challenging course is designed for highly motivated and industrious students including those preparing to take the AP French exam at the end of their fourth year of studies. Students who take this course should be serious about mastering the French language. French will be the only language spoken in the classroom. Students will be encouraged to use their new language in class, at home, and on the Internet. The pace of learning will be rapid, while emphasis will remain on true mastery of basic communication skills. There will be weekly reading and essay assignments. There will be extensive use of the Internet, videos, CD oral exercises, music, and films. In the second semester, students will be introduced to major literary works, and will be given lengthy writing assignments. Students will participate in the National French Contest in the second semester.

French 4

(Grades 11, 12) 1 Unit Prerequisites: "C" in the last semester of French 3

This course provides a comprehensive review of the grammar presented in the first three years while introducing students to more advanced verbal and grammatical structures. It is conducted in the target language providing the students with maximum exposure to the language. Interesting texts, videos, articles on current issues and events as well as Francophone literature excerpts are presented and lead to a more in-depth look at Francophone culture. Class discussions increase the students' cultural awareness and proficiency in French. Students' performance in the language is regularly assessed through compositions, projects, oral presentations, tests, and semester exams. All students will participate in the National French Contest in March.

Advanced Placement French

(Grades 11, 12) 1 Unit Prerequisites: "B" in the last semester of Honors French 3

The thrust of this course is to have students further develop their interpretive, interpersonal, and presentational communication skills via reading and writing, speaking and listening, as well as Francophone culture. This class is conducted exclusively in the target language providing the students with maximum exposure to the language. They will develop sophisticated vocabulary, discourse techniques, and are exposed to multimedia material which they comprehend, analyze, and discuss. Students will express ideas and opinions about newspaper and magazine articles, internet sources, music videos, documentaries, dramatic excerpts, films, and commercials. The course will take a thematic approach and the AP exam follows suit. The six major themes to be studied are: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Family Communities, and Beauty and Aesthetics. All students will participate in the National French Contest in March and will take the AP exam in May. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

SPANISH

Spanish 1

(Grades 9-11) 1 Unit Prerequisites: None

This is an introductory course designed to develop the four basic skills: listening, speaking, reading, and writing, with emphasis on oral communication. Students are also introduced to the fundamentals of phonetics and grammar and to life in the Hispanic countries. Students are required to actively participate as oral communication is stressed.

Honors Spanish 1

(Grades 9, 10) 1 Unit Prerequisites: By selection only

Honors Spanish 1 is the beginning of an accelerated study of Spanish language and culture. With a faster pace than the standard Spanish 1 course, students in Honors Spanish will begin preparation for taking the Advanced Placement Examination in their final year of study.

Spanish 2

(Grades 10-12) 1 Unit Prerequisites: "C" in the last semester of Spanish 1

Students will continue to develop proficiency in the four skills: listening, speaking, reading, and writing. Culture and more advanced grammar will be introduced. Students must actively participate since oral communication is stressed.

Honors Spanish 2

(Grades 10, 11) 1 Unit Prerequisites: "B" in the last semester of Honors Spanish 1

This is an **accelerated** course designed for the **highly motivated** student who received at least a "B" in Spanish 1. One of the goals of this course is to provide a solid foundation for those students wishing to qualify for the Advanced Placement course in the fourth year. Students will cover additional vocabulary, idiomatic expressions, and grammar. Short compositions and quarter projects will be assigned, and students will be required to use the computer programs in the library on a weekly basis. Students will be expected to make every effort to speak Spanish in class within the realm of their knowledge of the language. Thoughtful consideration with regards to the student's motivation and willingness to do honors level work should be given on the part of both student and parent. After the initial period no class changes will be made.

Spanish 3

(Grades 11, 12) 1 Unit Prerequisites: "C" in the last semester of Spanish 2

This is an advanced language course conducted mostly in Spanish. Students will continue to improve their listening and speaking skills and further expand vocabulary, knowledge of idiomatic expressions, and grammar. More emphasis will be put on development of reading and writing skills. In addition, students will write essays and give oral presentations.

Honors Spanish 3

(Grades 11, 12) 1 Unit Prerequisites: "B" in the last semester of Honors Spanish 2

A challenging course designed for the highly motivated student who has completed Honors Spanish 2 and who intends to qualify for the Advanced Placement course during the fourth year. Highly motivated students may take the course even if they do not intend to take the Advanced Placement course, but thoughtful consideration with regards to the student's motivation and willingness to do honors level work should be given on the part of the student and parents. Emphasis will be placed on mastering the four skills: listening, speaking, reading, and writing. Online authentic sources and practice, films, videos, and newspapers will also provide a basis for class discussions and essays. Students will be expected to speak the language in class and the class will be conducted mostly in Spanish, except for grammar explanations.

Spanish Communication and Culture

(Grades 11, 12) 1 Unit Prerequisites: Spanish 3, Honors Spanish 3, Spanish 4, or AP Spanish

This class employs the Communicative Method of teaching, where content is focused around concepts and functions rather than grammatical structures. Content focuses on developing oral and written communication while using natural, everyday expressions in "real-life" situations. Units focus on using Spanish in various professional arenas including the world of business, schools, health care facilities, and other community service organizations. Students are placed in community based organizations for service learning for a minimum of 20 hours per scholastic year, whereby they may apply the language acquired and explore and reflect on community service and civic responsibilities.

Spanish 4

(Grade 12) 1 Unit Prerequisites: "C" in the last semester of Spanish 3

The goal of the course is to help the advanced student express himself with reasonable accuracy in the Spanish language. Online authentic sources, practice, and videos, films, newspapers, and magazines will provide a wide range of timely cultural topics for classroom discussion, oral presentation, and related essays. Grammatical structure and skills acquired in the preceding years will be strengthened. This course is conducted in Spanish.

Advanced Placement Spanish

(Grade 12) 1 Unit Prerequisites: "B" in the last semester of Honors Spanish 3

This course, conducted in Spanish, is intended to prepare the highly motivated, self-disciplined student for the Advanced Placement Examination in Spanish Language & Culture. The student may earn college credit based on the quality of his performance on the examination. The student will dedicate his efforts to intensive oral and written work on any topic and will be expected to express himself in clear, fluent Spanish comparable to that spoken by students on an advanced university level. Verbal skills will be improved through the use of authentic sources and materials, videos, films, and online resources. A testing fee is required. Students must maintain a B+ or better average in the course to do well on the A.P. exam. Thoughtful consideration with regards to the student's motivation and willingness to do college level work should be given on the part of the student and parents. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

SCIENCE DEPARTMENT

Honors Biology

(Grades 9, 10) 1 Unit Prerequisites Grade 9: By selection only
Prerequisites Grade 10: 3.8 G.P.A. and Department Chair permission

Honors Biology is an advanced-level course in biology that takes a molecular approach. The connections between biology and other natural sciences as well as the humanities and social sciences are explored in detail. Topics to be covered include general chemistry, cytology, genetics, cell metabolism, and DNA function and analysis. Classroom activities and lab work supplement class lecture. Students are selected for this course based upon the results of the High School Placement Test. If taken as a freshman, the student must take a Physics course as a junior or senior. This course is taught in a digital format.

Biology

(Grades 9, 10) 1 Unit Prerequisites: None

This course covers the world of life found on our planet, with emphasis placed on gaining an understanding of the role of each organism in its place in the biosphere and interconnections between organisms. Topics covered include ecology, flow of energy in the biosphere, cell biology, methods of reproduction, genetics and a general survey of organisms on the planet. An inquiry approach is utilized with laboratory exercises to supplement in-class topics. A DNA fingerprinting lab introduces students to the concept of biotechnology. If taken as a freshman, the student must take a Physics course as a junior or senior. If taken as a sophomore, the student must take a Science elective senior year. This course is taught in a digital format.

Advanced Placement Biology

(Grades 11, 12) 1 Unit Prerequisites: "A" in Biology and Chemistry or "B" in Honors Biology and Honors Chemistry and Department Chair permission

This course provides an introduction to biological sciences on a college level. It is designed to acquaint the student with the principles of life and their application to living things. The concepts studied in first-year biology are explored in greater depth. Classroom activities are supplemented with laboratory work. (Laboratory experiences may require time outside of the normal class schedule.) Students will write the AP Biology Exam given in the spring. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Honors Chemistry

(Grades 10, 11) 1 Unit Prerequisites from Honors Biology: Teacher recommendation
Prerequisites from Biology: 3.8 GPA and Department Chair permission

Honors Chemistry covers the same topics as the College Prep and Academic Chemistry courses but in greater depth and with greater emphasis on problem-solving skills and laboratory work. A science fair project is required of all students. This course is taught in a digital format.

Chemistry

(Grades 10, 11) 1 Unit Prerequisites: Biology

Chemistry is the study of matter and energy and the relationship between the two. The classifications of matter are studied (elements, compounds, mixtures, solutions), as well as the mole concept, atomic structure, principle of chemical reactions, chemical bonding, phases of matter, chemical equilibrium, reaction kinetics, and acids and bases. Laboratory activities supplement the lecture material. This course is taught in a digital format.

Advanced Placement Chemistry

(Grades 11, 12) 1 Unit Prerequisites: "A" in Biology and Chemistry or "B" in Honors Biology and Honors Chemistry and Department Chair permission

This course is a college level introduction to inorganic chemistry with stress on reaction principles and some descriptive chemistry of the elements. Experiments are selected to reinforce lecture materials (and are scheduled before school hours); aspects of quantitative and qualitative analysis are studied. A testing fee is required. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

General Chemistry

(Grades 10, 11) 1 Unit Prerequisites: Biology

Chemistry is the study of matter and energy and the relationship between the two. The classifications of matter are studied (elements, compounds, mixtures, solutions), as well as the mole concept, atomic structure, principle of chemical reactions, chemical bonding, phases of matter, chemical equilibrium, reaction kinetics, and acids and bases. Laboratory activities supplement the lecture material. Classes are smaller to allow students more individual attention. This course is taught in a digital format.

Physics

(Grades 11, 12) 1 Unit Prerequisites: Any Biology and any Chemistry

This introductory course in physics starts with a study of motion and is expanded into considerations of force, momentum, and energy. The second semester starts with the theory and mechanics of wave motion, followed by light and optics. The course is completed with a study of electricity and nuclear physics. Classroom lecture and problem solving is reinforced by laboratory experiences. Class periods will consist of a combination of lecture, discussion, hands-on learning opportunities, or laboratory experiments. This course is taught in a digital format.

Advanced Placement Physics

(Grades 11, 12) 1 Unit Prerequisites: "B" in Honors Biology and Honors Chemistry

AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on inquiry based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation and waves. No prior course work in physics is necessary for students to enroll in AP Physics. AP Physics covers the same topics as the Physics and General Physics courses, but in greater depth and with greater emphasis on problem-solving skills and laboratory work.

General Physics

(Grades 11, 12) 1 Unit Prerequisites: Any Biology and any Chemistry

This introductory course in physics starts with a study of motion and is expanded into considerations of force, momentum, and energy. The second semester starts with the study of electricity and magnetism, followed by the theory and mechanics of wave motion; and the course is completed with light and optics. Emphasis throughout the course is on the processes of problem solving and logical thinking, minimizing formula memorization. Classroom lecture and problem solving is reinforced by laboratory experiences. Classes are smaller to allow students more individual attention. This course is taught in a digital format.

Environmental Science

(Grades 11, 12) ½ Unit Prerequisites: Any Biology and any Chemistry

This interdisciplinary approach to our world emphasizes the history of the environmental concerns and species interactions with each other. Information learned in lectures is reinforced or enhanced through field studies and experimentation. This course will utilize a hands-on approach and include work outside the classroom in the field including the use of Labquest2 data loggers. Students will conduct an aquatic or terrestrial field study project. Additional topics covered in climate change, biodiversity, orienteering, biogeochemical cycles, and ecosystems.

Human Anatomy and Physiology

(Grades 11, 12) ½ Unit Prerequisites: Any Biology and any Chemistry

This semester long course covers as many of the eleven major human body systems (muscular, skeletal, etc.) as we can-connecting form of structure to function of said structure. Once comprehension of normal mechanisms has occurred, disease states will be taught, with special emphasis placed on medical microbiology: the impacts of microscopic living organisms on human health. Infectious organisms have influenced human history, such as plague, flu, and HIV/AIDS and will continue to do so; members of a productive society should understand those past, and potential future effects. We utilize Kapit's excellent "The Anatomy Coloring book" to help diagram memorization. There are note quizzes, diagram quizzes from the coloring book, chapter tests, and several lab practicals. The course will have several lab exercises.

Forensic Science

(Grades 11, 12) ½ Unit Prerequisites: Any Biology and any Chemistry

This introductory course in forensic science starts with observations and evidence collection. It is expanded into considerations of hair, fibers, fingerprints, handwriting, and tool marks. Blood spatter, DNA profiling and anthropology are also studied. The course is completed with a mock "crime scene investigation" in which students will apply the concepts learned throughout the semester in order to "solve the crime." The emphasis throughout the course is on the processes of problem-solving and logical thinking. Classroom lecture and problem-solving is reinforced by laboratory experiences. This course is taught in a digital format.

Introduction to Engineering 1

(Grade 12) ½ Unit Prerequisites: Physics

In this course students are exposed to different types of engineering that have mechanical focus. Students will learn the basic responsibilities of product design and manufacturing engineers, they will be exposed to the types of problems these engineers are faced with, and will also learn about intellectual property. The first quarter will focus on mechanical engineering where we will cover topics such as torque, thermodynamics, testing to mechanical failure, and strengths of materials. The second quarter will cover topics such as data analysis, manufacturing line optimization, and human factors.

Introduction to Engineering 2

(Grade 12) ½ Unit Prerequisites: Physics (Into to Engineering 1 is NOT a prereq)

In this course students are exposed to different types of engineering that have an electrical focus. Students will learn the basic responsibilities of product design and manufacturing engineers. They will be exposed to the types of problems these engineers are faced with, and will also learn about intellectual property. The first quarter will focus on electrical engineering where we will cover topics such as AC circuits, 3-phase current, and electronics. The second quarter will discuss computer engineering and will cover topics such as programming and logic.

SOCIAL STUDIES DEPARTMENT

U.S. History and Geography

(Grades 9, 10) 1 Unit Prerequisites: None

U.S. History and Geography provides a concentrated study of the history of the United States from its development as a world power to its present day position. Major topics of study in the first semester will include: the Growth of the West; the Impact of Progressivism; the Spanish-American War; World War I; the Jazz Age; the Great Depression.

The second semester begins with a study of World War II and will include: the Cold War; the Evolution of the Civil Rights Movement; Wars in Korea and Vietnam; 21st Century Challenges in a Global World. The influence of geographical factors is included in each section of study. The student will examine primary sources as well as visual accounts of our nation's development.

World History and Geography

(Grades 10-12) 1 Unit Prerequisites: None

World History and Geography is a full-year course which introduces the student to the geographical, political, economic, and social developments of world history. The course begins with an examination of Islam and its relationship with the then-known world. Although the course stresses the progression of history in Europe, a global examination is made of other cultures.

This course examines the following areas of content: The Middle Ages; Western European Christian Civilization; Exploration; Nationalism and Industrialization; Asia and The Middle East; 20th and 21st Century World Events.

Advanced Placement European History

(Grades 10-12) 1 Unit Prerequisites: 3.5 cumulative G.P.A. and departmental permission

This course provides a college-level survey of the political, social, and economic history of Europe from the Renaissance through the fall of the Soviet Union. Major skills emphasized are reading comprehension, critical analysis, and effective techniques of essay response. College credit may be obtained based on the students' performance on the National AP Exam prepared by the College Board of Princeton, New Jersey. There is a fee required for the test, which is administered here at Catholic Central. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Contemporary Social Issues

(Grades 11, 12) ½ Unit Prerequisites: None

This is a social studies elective semester course which covers the current social issues and events in the United States and around the world. The class will be broken down into eight different themes and topics that will be teacher driven. The topics will consist of race and ethnicity, religion, gender rights, health and medical, social stratification, culture, media and technology, and politics. Themes and topics could change from semester to semester based on current topics and their relevance.

The Civil War

(Grades 11, 12) ½ Unit Prerequisites: None

This course examines the origins, impact, and course of the Civil War, the most traumatic event in American history. The first part of the course deals with the events and causes leading to the Civil War, including the tensions between North and South. The second part covers the military campaigns and the domestic problems of both sides and the effects on the United States.

Holocaust Studies

(Grades 11, 12) ½ Unit Prerequisites: None

This is a social studies elective semester course which covers both the formation of the Third Reich and the specific event in history known as the Holocaust. This course includes elements of history, political science, psychology, and social justice. It also includes trips to the Holocaust Museum and guest speakers on the topic.

Advanced Placement United States History

(Grades 10-12) 1 Unit Prerequisites: 3.5 cumulative G.P.A.
and
departmental permission

This course offers the student an in-depth, college-level study of major political, economic, and social developments in U.S. history. Class discussion of critical issues and the writing of essays dealing with important topics in our nation's history will be emphasized. College credit may be obtained based on the student's performance on the national A.P. exam prepared by the College Board of Princeton, New Jersey. There is a fee required for the test, which is administered here at Catholic Central. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

American Government

(Grade 12) ½ Unit Prerequisites: None

This course studies the function and operation of national, state, and local government, covering both political theory and practical application. Each student is required to complete eight hours of political work in order to receive credit for this course.

Advanced Placement United States Government and Politics

(Grade 12) 1 Unit Prerequisites: 3.5 cumulative G.P.A. and departmental permission

This course is designed to prepare students for the A.P. exam in United States Government and Politics. It will cover the following major content areas: the constitutional basis of democracy; beliefs and behaviors of special interest groups; political parties; the Congress; the presidency; the bureaucracy; the federal courts; civil liberties and civil rights.

Each student is required to complete eight hours of political work in order to receive credit for this course. College credit may be obtained based on the student's performance on the national A.P. exam prepared by the College Board of Princeton, New Jersey. There is a fee required for the test, which is administered here at Catholic Central. Failure to complete the AP Exam will result in the loss of the extra honor point for the entire year.

Economics

(Grade 12) ½ Unit Prerequisites: None

This one-semester course introduces students to both microeconomic and macroeconomic principles as they relate to individuals and businesses. The microeconomic focus includes the nature and method of economics as well as the role of private and government sectors. Emphasis is placed on the concepts of scarcity, opportunity costs, market characteristics, and the laws of supply and demand. The macroeconomic focus includes the study of business cycles, the Federal Reserve System, competition within the domestic and international markets, and monetary and fiscal policies. Students will construct economic models, analyze graphs, and participate in simulations geared toward demonstrating life application.

Psychology

(Grades 11, 12) ½ Unit Prerequisites: None

This course is an overview of the science of human behavior. It is designed to familiarize the beginning student with the major figures of psychology/psychiatry as well as the discipline's four basic approaches: Behaviorist, Freudian, Structuralist, and Humanist.

Sociology

(Grades 11, 12) ½ Unit Prerequisites: None

This course offers an overview of sociology's concepts and methods. It examines sociology's relationship to other social sciences and gives an introduction to theories and research, which explain man's behavior in group settings. It focuses upon the strengths and weaknesses of society's responses to the fundamental needs of human life: the family, government, religion, education, groups, etc.

THEOLOGY DEPARTMENT

Revelation

(Grade 9) ½ Unit Prerequisites: None

The purpose of this course is to give students a general knowledge and appreciation of the Sacred Scriptures. Through their study of the Bible they will come to encounter the living Word of God, Jesus Christ. In the course they will learn about the Bible, authored by God through inspiration, and its value to people throughout the world. They will learn how to read the Bible and will become familiar with the major sections of the Bible and the books included in each section. The students will pay particular attention to the Gospels, where they may grow to know and love Jesus Christ more personally.

Christology

(Grade 9) ½ Unit Prerequisites: None

The purpose of this course is to introduce students to the mystery of Jesus Christ, the living Word of God, the Second Person of the Blessed Trinity. In this course students will understand that Jesus Christ is the ultimate Revelation to us from God. In learning about who He is, the students will also learn who He calls them to be.

Paschal Mystery

(Grade 10) ½ Unit Prerequisites: None

The purpose of this course is to help students understand the significance of the Death, Resurrection, and Ascension of Christ more deeply. Jesus' teaching, the Jewish promise of the Messiah, and the relationship between the Last Supper and Crucifixion will be discussed. The Students will be challenged to understand the depth of Christ's gift, and its historicity. The historical evidence for the Resurrection will also be established. The topic of suffering will be given special emphasis as it pertains to the Paschal Mystery and the life of a disciple of Jesus Christ.

Ecclesiology

(Grade 10) ½ Unit Prerequisites: None

The purpose of this course is to help students understand that in and through the Church they encounter the living Jesus Christ. They 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 students will come to know that the Church is the living Body of Christ today. This Body has both divine and human elements. In this course, students will focus on the sacred nature of the Church more than on the events of the Church.

Sacramental Theology

(Grade 11) ½ Unit Prerequisites: None

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, and especially through the Eucharist. Students will examine each of the sacraments in detail so as to learn how they may encounter Christ throughout life.

Moral Theology

(Grade 11) ½ Unit Prerequisites: None

The purpose of this course is to help students understand that it is only through Christ that they can fully live out God's plans for their lives. Students are to learn the moral concepts and precepts that govern the lives of Christ's disciples.

Biblical Theology

(Grade 12) ½ Unit Prerequisites: None

The purpose of this course is to give an overview of Sacred Scripture with an introduction to the basic principles for understanding and interpreting the Bible. This course will offer comments about Scripture's purpose and religious significance. Furthermore, it will project a sense of the unity of the narrative for the divine plan of salvation, the presence of God's action in this record of His Revelation, and His desire to share His merciful love with us. Special attention will be given to the topics on authorship, date of composition, and formation of text of each book of the Bible.

Catholic Social Teaching

(Grade 12) ½ Unit Prerequisites: None

The purpose of this course is to introduce students to Catholic social teaching, and its principles. Social Justice uses various documents of the church, as well as an extensive discussion, to look at current world problems and their justice implications. The course attempts not only to present information but also to strengthen the students' ability to reason and apply principles to their own life situations. Morality and social conscience are discussed, as well as the responsibility we all have as Christians to accept our role as brother's keepers.

Christian Vocations

(Grade 12) ½ Unit Prerequisites: None

The purpose of this course is to help students to understand that God created humans in His image and likeness: to know Him, love Him, and be with Him in this life and through eternity. How do we respond to this glorious call? This course explores the various vocational states of life; married, ordained, consecrated, and single, as a means to responding to God's call of salvation. There is great emphasis on understanding and discovering truth from faith and reason, anthropology, and John Paul II's Theology of the Body.

Church History

(Grade 12) ½ Unit Prerequisites: None

The Ecclesiology course presented a catechesis of the Church and the Body of Christ in history: its nature and meaning, images, marks, life and ministry, guide to moral life, and the role of prayer. This elective will supplement that catechesis on the Church. The purpose of this course is to supply the students with a general knowledge of the Church's history from apostolic times to the present. They will be introduced to the fact that the Church was founded by Christ through the Apostles and is sustained by Him throughout history through the Holy Spirit. The students will come to know that the Church is the living Body of Christ today and, as such, has both divine and human elements. In this course, students will learn about the Church's 2,000 years of history and about how the Church is led and governed by the successors of the Apostles.

Ecumenism

(Grade 12) ½ Unit Prerequisites: None

The purpose of this course is to help the students to understand the manner in which the Catholic Church relates to other Christians as well as to 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 to recognize the ways in which important spiritual truths and grace can also be found in Christian churches and ecclesial communities as well as in other religions. It is also intended to help them to recognize the ways in which other systems of belief and practice differ from and are similar to the Catholic faith.