VILLA MADONNA ACADEMY

Challenging Minds, Strengthening Spirits

High School Curriculum Guide

2012 – 2013

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Academic Departments

Business/Technology

Business Essentials

One Semester Program

Grade Level: 11, 12

Course Overview:
The Business Essentials course is designed to introduce students to business organization, ownership, management, marketing, business law, accounting, entrepreneurship, and business careers. Students will demonstrate the knowledge learned by incorporating the above disciplines into a business plan. Students participate in making business decisions while playing an interactive business game simulation program.

Course Objectives:

1) Understand the different forms of business ownership
2) Outline the advantages and disadvantages of franchises
3) Understand entrepreneurship and analyze what it takes to start a small business
4) Explain the four functions of management
5) Explain the importance of human resource management
6) Explain how the marketing concept applies in organizations
7) List and describe the four Ps of marketing
8) Understand the importance of financial information and accounting
9) Explain how to work within the legal business environment

Course Prerequisites:
None, this is an elective course.

Introduction to Accounting

One Semester Program

Grade Level: 11, 12

Course Overview:
The Introduction to Accounting course is designed to provide students with a strong foundation in accounting principles. Students will learn what business transactions are and how accountants use a double-entry system (debits and credits) to keep track of these transactions. Students will study the complete accounting cycle of recording transactions, preparing financial statements, and “closing the books” for a small, single-owner service and merchandising businesses.

Course Objectives:

1) Learn the accounting equation: Assets = Liabilities + Owners' Equity
2) Understand how transactions impact the accounting equation.

3) Understand accounts, debits and credits, the general journal, general ledger, and trial balance
4) Understand and be able to prepare adjusting entries for multi-period costs and revenues and accrued revenues and expenses.
5) Articulate the steps in the accounting cycle process.
6) Know how to prepare the four core financial statements.
7) List the classifications for assets on a classified balance sheet.
8) Understand special issues related to the merchandising businesses
9) Understand Basic accounting for payroll and payroll related taxes.

Course Prerequisites:
Students should have successfully completed the Business Essentials course.

Personal Finance

One Semester Course

Grade Level: 11, 12

Course Overview:
Personal Finance is a course designed to introduce personal financial planning, financial services, budgeting, investments, and insurance protection. Students will develop strategies for managing resources, explore skills for the wise use of credit, and gain insight into the different ways of investing money. Students participate in a national 10-week stock market simulation game.

Course Objectives:

1) Understand pay, payroll deductions, benefits, and working conditions
2) Explain the purpose of taxes, define tax terminology, prepare tax forms 1040EZ
3) Explain purpose of financial planning and prepare a personal budget
4) Describe banking services and understand how to manage a checking account
5) Explain how money grows through compounding and understand different savings options
6) Describe investment strategies and options
7) Describe the process of buying and selling stocks and explain how to read the stock listings and stock indexes, and discuss mutual funds as an investment strategy
8) Describe features of corporate and government bonds
9) List and describe types of credit and understand the responsibilities of consumer credit
10) Discuss good credit management rules and how to avoid credit scams
11) List and explain the steps of the car-buying process
12) Explain vehicle financing choices and identify the costs of owning a car
13) Explain the cost of insurance and how risks are spread
14) Discuss common types of automobile insurance coverage
15) Describe group and individual health insurance, Medicare and Medicaid coverage

Course Prerequisites:
None, this is an elective course.

AP Computer Science/Computer Science

Full Year Program

Grade Level: 12

Course Overview:
This course covers the fundamentals of the Java programming language and all topics needed to prepare students for the AP-A examination. Topics covered include fundamentals of Java, classes, arrays, inheritance, polymorphism, and recursion.

Students may choose between Computer Science or AP Computer Science. AP Computer Science students will be expected to do additional assignments, will have the option of taking the AP exam, and will be graded on a different scale for tests and quizzes

This class requires extra time commitments beyond the scheduled classroom time. Students will be required to work on program assignments at home. Software will be provided to students to enable them to work on assignments on a home personal computer.

Course Objectives:

1) To help students to understand major hardware and software components and systems
2) To help students to understand the ethical and legal issues that accompany computer usage
3) To learn to declare variables, do mathematical calculations, and begin to use applets
4) To learn to work with both decision and looping structures
5) To learn to write classes and how to break code into usable pieces
6) To learn polymorphism and inheritance
7) To learn arrays, arrays of objects, and the use of the Java Collection Class ArrayList
8) To learn to work with inherited classes and interfaces
9) To learn to write recursive code
10) To learn to work with the Java Case Study – "GridWorld" in preparation for the AP-A exam

Course Prerequisites:
All students should have completed the Web Programming course, achieving a "B" grade or better in the ASP (Active Server Pages) section of the course, or successfully completed Northern Kentucky University's Java Programming course (offered in the summer for free) or should get permission from the Technology Teacher to waive these prerequisites. AP student must meet or exceed the AP potential score from standardized tests and/or have a recommendation by the Technology teacher.

Limited Class size.

Adobe Technical Applications

One Semester Course

Grade Level: 11, 12

Course Overview:
This course introduces students to both the **Adobe Photoshop** image editing and **Adobe InDesign** page layout software. Students explore the basics of Photoshop, including basic photo corrections, retouching and repairing, working with selections and layer basics. In addition, the class discusses masks and

channels, vector drawing techniques, and typographic design. Next, students learn Adobe InDesign CS by understanding the basics of page layout, setting up multiple page documents, working with frames, formatting text, working with color, working with styles and graphics, creating tables, learning transparency and output/exporting. This hands-on project-oriented class enhances the student's ability to work with image editing and desktop publishing techniques.

Course Prerequisites:
None, this is an elective course.

Class Size Limit:
Student Class Size of 15 – Due to the interactive instructional process of this course, this class must be limited in size.

Web Programming and Design

Full Year Program

Grade Level: 11, 12

Course Overview:
Students learn the basics of web page design and site navigation using HTML (HyperText Markup Language). Students learn how to use the Adobe Dreamweaver CS3 web authoring tool to create static web pages. The JavaScript scripting language is introduced to add interactivity to the web pages. Several web navigational techniques in Dreamweaver are explored. Students learn how to build interactive, dynamically-generated web sites. Microsoft's Active Server Pages (ASP) technology is used for server-side scripting. ASP is a powerful, programmer-friendly scripting technology that uses VBScript to manipulate a small collection of very powerful programming objects. Students are able to add, change and delete data records in a Microsoft Access database via programs developed using ASP technology. Students learn how to work within the Adobe Flash and Photoshop CS3 graphics design program to enhance web page with interactive graphics.

Course Prerequisites:
All students should have basic computing skills.

Class Size Limit: Student Class Size of 15- Due to the interactive instructional process of this course, this class must be limited in size.

English

English I

Full Year Program

Grade Level: 9

Course Overview:
This course will use a combination of an anthology, novels, and other literature to broaden one's understanding and appreciation for a variety of literature and universal themes. The writing process will be emphasized including essay writing according to the MLA format. Research skills will be developed,

combining technology and library skills. In addition, vocabulary enrichment is stressed as an integral part of the course. Finally, effective communication skills will be developed.

Course Prerequisites:
All students will have successfully completed eighth grade language arts.

English II

Full Year Program

Grade Level: 10

Course Overview:
This course will use a combination of an anthology, novels, dramas, and other literature to broaden one's understanding and appreciation of world literature and universal themes. The writing process will be emphasized including essay writing according to the MLA format as well as writing in response to literature. Research skills will be advanced, combining technology and library skills. In addition, vocabulary enrichment is stressed as an integral part of the course. Finally, effective communication skills will be developed.

Course Prerequisites:
All students will have successfully completed English I.

English II Honors

Full Year Program

Grade Level: 10

Course Overview:
This course will use a combination of an anthology, novels, dramas, and other literature to broaden one's understanding and appreciation of world literature and universal themes. A concentration of AP literature will be emphasized. The writing process will include essay writing according to the MLA format and writing in response to literature. These writings will be prepared and in-class in response to literature. Research skills will be enhanced, combining technology and library skills. In addition, vocabulary enrichment is stressed as an integral part of the course. Finally, effective communication skills will be developed.

Course Prerequisites:

- PSAT score of 45 or higher in Critical Reading and Writing
- Maintain an average of a B+ or higher in English I
- Consistent active class participation including coming to class prepared and turning work in on time
- Interest in doing literary criticism and serious study of many works of literature
- Commitment to developing and improving one's writing style
- Strong connection to literature
- Good grasp of grammar and strong writing skills
- Completion of Honors application and submission to one of the teachers in the English department by the due date.

Placement in Honors English is not necessarily a prerequisite to going on to another Honors English class or AP English. However, it helps better prepare students for the AP exam by exposing them to more literature, literary criticism, and the types of questions found on the AP exams.

Course Objectives:

1. Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.
2. Students make sense of the variety of materials they read.
3. Students make sense of the various messages to which they listen.
4. Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.
5. Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.
6. Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.
7. Students observe, analyze, and interpret human behaviors to acquire a better understanding of self, others, and human relationships.
8. Students shall develop their abilities to become self-sufficient individuals.
9. Students demonstrate self-control and self discipline.
10. Students demonstrate the ability to learn on one's own.
11. Students effectively use interpersonal skills.
12. Students use productive team membership skills.
13. Students individually demonstrate consistent, responsive, and caring behavior.
14. Students demonstrate the ability to accept the rights and responsibilities for self and others.
15. Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.
16. Students shall develop their abilities to think and solve problems in school situations and in a variety of situations they will encounter in life.
17. Students use creative thinking skills to develop or invent novel, constructive ideas or products.
18. Students connect knowledge and experiences from different subject areas.
19. Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.
20. Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experiences

English III

Full Year Program

Grade Level: 11

Course Overview:

This course will use a combination of an anthology, novels, dramas, and other literature to broaden one’s understanding and appreciation of American literature and universal themes. The writing process will be emphasized including creative writing and essay writing according to the MLA format. These writings will be prepared and in-class in response to literature. Research skills will be refined, combining

technology and library skills. In addition, vocabulary enrichment, both programmed and contextual, is stressed as an integral part of the course. Finally, effective communication skills will be developed.
Course Prerequisites:
Students will have successfully completed English II or English II Honors.

English III Honors/AP

Full Year Program

Grade Level: 11

Course Overview:
This course will use a combination of an anthology, novels, dramas, and other literature to broaden one's understanding and appreciation of American literature and universal themes. A combination of AP literature will be emphasized as well as writing prompts that could prepare students for the AP language exam. The writing process will be stressed including creative writing and essay writing according to the MLA format. These writings will be prepared and in-class in response to literature. Research skills will be refined, combining technology and library skills. In addition, vocabulary enrichment, both programmed and contextual, is highlighted as an integral part of the course. Finally, effective communication skills will be developed.

Course Prerequisites:

- PSAT score of 45 or higher in Critical Reading and Writing
- Maintain an average of a B+ or higher in English II.
- Consistent active class participation including coming to class prepared and turning work in on time
- Interest in doing literary criticism and serious study of many works of literature
- Commitment to developing and improving one's writing style
- Strong connection to literature
- Good grasp of grammar and strong writing skills
- Completion of Honors application and submission to one of the teachers in the English department by the due date.
- Students need to show a good understanding of the MLA style of writing and documentation.

Placement in Honors English is not necessarily a prerequisite to going on to another Honors English class or AP English. However, it helps better prepare students for the AP exam by exposing them to more literature, literary criticism, and the types of questions found on the AP exams.

Course Objectives:

1. Students use reference tools such as dictionaries, almanacs, encyclopedias, and computer reference programs and research tools such as interviews and surveys to find the information they need to meet specific demands, explore interests, or solve specific problems.
2. Students make sense of the variety of materials they read.
3. Students make sense of the various messages to which they listen.
4. Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.
5. Students speak using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.
6. Students use computers and other kinds of technology to collect, organize, and communicate information and ideas.

7. Students observe, analyze, and interpret human behaviors to acquire a better understanding of self, others, and human relationships.
8. Students shall develop their abilities to become self-sufficient individuals.
9. Students demonstrate self-control and self discipline.
10. Students demonstrate the ability to learn on one's own.
11. Students effectively use interpersonal skills.
12. Students use productive team membership skills.
13. Students individually demonstrate consistent, responsive, and caring behavior.
14. Students demonstrate the ability to accept the rights and responsibilities for self and others.
15. Students demonstrate an understanding of, appreciation for, and sensitivity to a multicultural and world view.
16. Students shall develop their abilities to think and solve problems in school situations and in a variety of situations they will encounter in life.
17. Students use creative thinking skills to develop or invent novel, constructive ideas or products.
18. Students connect knowledge and experiences from different subject areas.
19. Students use what they already know to acquire new knowledge, develop new skills, or interpret new experiences.
20. Students expand their understanding of existing knowledge by making connections with new knowledge, skills, and experience

English IV

Full Year Program

Grade Level: 12

Course Overview:
Senior English students will use a combination of a Prentice Hall anthology, as well as additional novels, and dramas to become familiar with a recognized body of British literature. Weekly vocabulary study, a variety of writing assignments both prepared and on-demand and refined study of literary criticism will aid the students to become skillful writers and to feel at ease in a college literature course at the end of this course. A special emphasis will be placed on essay writing to facilitate writing the college essay.

Course Prerequisites:
Successful completion of English III or English III Honors.

AP English Literature

Full Year Program

Grade Level: 12

Course Overview:
AP English should produce proficient writers, avid readers, and critical thinkers. The students are exposed to a great amount of poetry and prose from British and world literature. In addition to becoming proficient in literary criticism, the students will practice the objective questions or the timed writings from past AP exams each week and will thus know if they are successful candidates for the AP exam in May. National standards recommend that AP courses have no more than 15-18 students.

Course Prerequisites:
English Honors/AP

- Data supports AP readiness and potential
- Maintains consistent above average grades in class
- Makes strong connections to the text, beyond surface details
- Above average grammar and writing skills
- A strong work ethic and maturity level
- Ability to work independently and meet deadlines
- Fill out an AP application and return it to the AP English teacher by the due date.

Placement in Honors English is not necessarily a prerequisite to AP English. However, it helps better prepare students for the AP exam by exposing them to more literature, literary criticism, and the types of questions found on the AP exam.

Course Objectives:

1. To raise the level of the student's reading and written vocabulary through weekly programmed study.
2. To become more skillful and controlled writers through better use of various rhetorical strategies.
3. To become familiar with the four forms of discourse through essay writings, both prepared and in-class or timed writings.
4. To become more aware of the elements that signal great literature.
5. To complete formal writing assignments that focus on critical analysis of literature.
6. To read a variety of poetry, prose selections, novels and dramas to give the student an adequate basis from which to draw on the AP exam. (Often a book a month is assigned. The list of novels is on the Villa website.)
7. To practice weekly the objective questions and the timed writings. This work is required whether or not the student plans to take the AP exam.
8. To identify successful candidates for the AP exam.

Broadcast Journalism

Full Year Program

Grade Level: 11, 12

Course Overview:
The course will focus on the ethics of journalism, the journalistic style of writing especially as it pertains to broadcast journalism, elements of newsworthiness, and airing a broadcast.

Broadcast Journalism begins with an overview of television news history along with a survey of local and national newscasts. Students will learn every aspect of television news production, from writing and anchoring to producing, photography and editing. Each student will contribute to both VMA news broadcast in the cafeteria along with a webcast on the VMA website that will be updated at least once each week. This is a very hands-on class and every student is expected to participate daily. Students also must work well independently.

The course is taught in a newsroom environment under the pressure of weekly deadlines.
Students will be expected to cover stories outside class time and use their activity periods and study halls when possible.

Students who have taken Broadcast I or Yearbook/Journalism will take Broadcast II. Broadcast II expands on the information from Broadcast I and/or Yearbook/Journalism to include more in-depth application of producing a broadcast. This will include writing the copy, interviewing, filming, editing, and producing the broadcast for air and for the VMA website.

Course Prerequisites for Broadcast I:
1. Core requirements are met
2. Junior or senior standing
3. Signed recommendation by the English department following a writing sample and questionnaire

Course Prerequisites for Broadcast II:
1. Core requirements are met
2. Junior or senior standing
3. Successful completion of Broadcast I or Yearbook/Journalism
4. Signed recommendation by the English department following a writing sample and questionnaire

Class Size Limit: 9 – Due to the interactive instructional process of this course, class size is limited.

Yearbook/Journalism

Full Year Program

Grade Level: 11, 12

Course Overview:
Overall, this course will focus on creativity, technical writing, communication, cooperative skills, and problem-solving skills. Specifically, in regard to journalism, the journalistic writing process will be emphasized including gathering, writing, editing, publishing, and distributing information. Research skills will be refined, combining technology and library skills. In addition, specific aspects of journalism such as ethics in journalism will be studied. Finally, effective communication skills will be developed. In regard to the yearbook, creativity, proofing, decision-making, and problem-solving will be emphasized. Each student will be responsible for particular aspects in producing both the yearbook and the newspaper. These responsibilities will range from writing articles and editing, photography, creating layouts, publishing, computer technology, sales and accounting, and advertising.

Course Prerequisites:
1. Core requirements are met
2. Junior or senior standing
3. Signed recommendation by the English department

Fine Arts

Art I History

Semester Program

Grade Level: 9

Course Overview:
This course includes the art history periods from the Renaissance through Impressionism. The student

will have the opportunity to learn about art styles, exemplary artists, art techniques and art vocabulary. In addition, the student will explore the art critiquing process, participate in relevant art activities and use technology for research and presentations.

Course Prerequisites:
None

Art I

Full Year Program

Grade Level: 9

Course Overview:
Art 1 is designed as an introduction into 2-d visual arts, primarily drawing and design. The student has the opportunity to learn various art techniques, skills and proper handling of art tools and materials. The student is also introduced to the art elements and principles of design as well as exemplary artists and art styles through visual art projects and reports. In addition, if time allows, the student will explore painting, printmaking and sculpture.

Course Prerequisites:
None

Art II History

Semester Program

Grade Level: 10

Course Overview:
This course includes the art history periods from Post-Impressionism through Contemporary Art. The student will have the opportunity to learn about art styles, exemplary artists, art techniques and art vocabulary. In addition, the student will explore the art critiquing process, participate in relevant art activities and use technology for research and presentations.

Course Prerequisites:
Successful completion of Art History 1 or permission of the Art teacher

Art II

Full Year Program

Grade Level: 10

Course Overview:
The course is designed to provide the student with a variety of 2-d and 3-d art experiences. The student has the opportunity to learn new art techniques and work in numerous art media. The student will learn about exemplary artists and art styles, as creative and self-expressive abilities are developed.

Course Prerequisites:
Successful completion of Art 1 or permission of the Art teacher

Art III

Full Year Program

Grade Level: 10, 11, 12

Course Overview:
The course is designed to challenge the student with more technical art processes and visual art problems of increasing difficulty through a variety of art media and subject matter. The student will create art works emphasizing independent thinking and begin to develop a personal artistic style.

Course Prerequisites:
Successful completion of Art 1 and Art 2 and the recommendation of the art teacher or successful completion of Art 1 and permission to waive Art 2 from the art teacher.

Art IV

Full Year Program

Grade Level: 11, 12

Course Overview:
The course is designed to further challenge the student with even more technical art processes and visual art problems of increasing difficulty through a variety of art media and subject matter. The student will create art works emphasizing independent thinking and continue in the development of a personal artistic style.

Course Prerequisites:
Successful completion of Art 3 and the recommendation of the art teacher

Art 5 Honors

Full Year Program

Grade Level: 12

Course Overview:
This independent study course is designed to allow the student to explore a variety of art processes, media, subject matter, and visual art problems of his/her choosing. With the teacher's approval and guidance, the student will design in-depth projects which will explore and further develop his/her personal artistic style.

Course Prerequisites

- Successful completion of Art 4
- Ability to work independently and meet deadlines
- Teacher approval

AP Art Studio

Full Year Program

Grade Level: 12

Course Overview:
AP Studio Art Drawing is a course designed for the art student to develop a comprehensive portfolio of work for the AP Studio Drawing Portfolio Exam. Through informed critical decision making, the student will develop a portfolio of work which demonstrates an exploration of the student's personal ideas as well as a mastery of drawing in concept, composition and execution. The Structure of the AP Studio Art Drawing Portfolio is divided into 3 sections: Quality, Concentration and Breadth.

Course Prerequisites

- Successful completion of Art 4
- Ability to work independently and meet deadlines
- Strong work ethic and high level of maturity
- Regular/consistent attendance
- Teacher approval

Music History I and II

Grade Level: 9, 10

Course Overview:
The music course includes history, theory, biography of musicians, music appreciation of diverse styles and cultures. The course of study may differ from year to year depending on the ability and interests of students.

Course Prerequisite: Successful completion of Music History I before taking II

Band

Full Year Program

Grade Level: 9, 10,11,12

Course Overview:
Band will meet everyday during the year. Students wanting to join band must have at least one year of previous experience on their instrument. No audition is required for joining band (although experience is required) and all concert band instruments will be permitted. Band will have 2 concerts a year. There may be other times where the band will be asked to perform (Pep rallies, etc.). Guitars and string

instruments are not able to be in the band. Facts about composers, arrangers, musical terms, etc. will also be presented. Playing tests will occur.

Course Prerequisite:
At least one year of playing experience on the instrument

Chorus

Full Year Program

Grade Level: 9, 10

Course Overview:
Chorus will meet everyday for a year. No audition is required for joining Chorus. Chorus will have 2 concerts a year. Occasionally, there will be other times where the chorus will be asked to perform (Baccalaureate, Honor Society induction, etc). Various types of music will be learned and performed. Facts about the composers, arrangers, musical terms, etc. will also be presented. Singing tests as well as written lyrics tests will occur.

Course Prerequisite: NONE

Music III

Full Year Program

Grade Level: 11, 12

Course Overview:
Music III will meet everyday for the entire year. Topics consist of key signatures, nonchord tones, analyzing and composing music, recognizing scales types, sight singing, dictation, etc.

Course Prerequisite:
Teacher approval and you must be able to read music.

Course Objectives:

- To understand how music is created.
- To understand the science, physics, and math involved in music.
- To recognize music as an important marker of its time and culture.
- To develop knowledge and understanding of, and respect for, superlative human musical accomplishments.

Drama

Full Year Program

Grade Level: 11,12

Course Overview:
This course serves as an introduction to drama and the theatre. Aspects of acting, directing, and play production will be covered as well as method concepts in playwriting. The goal of this course is to gain a better understanding and appreciation of theatre arts and to take dramatic theory and put it to practical work with the spring production each year. Each year, students will be involved in Creating, Performing and Responding to drama/theatre.

Course Prerequisites:
Seniors will be eligible for the drama elective if core requirements are met.

Course Objectives:
Students will

- use appropriate terminology to analyze and evaluate the use of elements of drama (literary, technical, performance) in a variety of dramatic works
- use the elements of drama to:
  - expressively create and perform dramatic works
  - explain how technical elements (staging, scenery, props, costumes, make-up, lighting, sound) and performance elements (acting, speaking, nonverbal expression) create mood, believable characters and advance the message being communicated
- use print and non-print sources to explore and evaluate a variety of dramatic works (e.g., theater and dramatic media – film, television, electronic media)
- describe, analyze and evaluate distinguishing characteristics of dramatic work representing a variety of world cultures (Japanese, American Modern and Contemporary) and historical/style periods (European: Renaissance, Neo-Classicism/"Classical, Romanticism, Realism)
- observe, classify, and perform dramatic works representing a variety of world cultures and historical/style periods
- use print and non-print sources to explore, describe and interpret universal themes, characterization, situations in dramas and characteristics of theater from different cultures or time periods
- compare, interpret and explain purposes for which drama/theatre is created (sharing the human experience, passing on tradition and culture, recreational, artistic expression)
- create or write new, observe, choose and perform dramatic works to fulfill a variety of specific purposes
- be actively involved in creating, improvising and performing dramatic works alone and with others, using elements of drama (Literary, Technical, Production)
- use knowledge of elements of drama to:
  - create and perform dramatic works in an expressive manner
  - describe and critique their own performances and the performances of others
- use a variety of resources (e.g., research, peers, technology) to:
  - write, refine, and record dialogue, monologues, and action
  - explore jobs/careers (e.g., playwright, director, actor) and skills associated with dramatic arts (theater, dramatic media)
  - identify and apply criteria for evaluating dramatic works (e.g., skill of performers, originality, emotional impact, variety, interest, technical requirements: lighting, sound, scenery, costumes, make-up)
- demonstrate behavior appropriate for observing the particular context and style of dramatic works being performed; discuss opinions with peers in a supportive and constructive way
- explore skills and training necessary for a variety of careers related to dramatic arts

Foreign Language

French I

Full Year Program

Grade Level: 9, 10, 11, 12

Course Overview:
French I initiates the student into the study of the French language and the Francophone culture. Using the text the student learns the essentials of grammar in order to speak, read and write simply in the new target language. These skills are enhanced with listening and speaking practice in the language lab and in class conversation.

Films are used to introduce the student to France and to Paris. Small research projects extend their familiarity with Parisian landmarks, another French city and several provinces of France. Cultural activities include Mardi Gras customs and cooking a French recipe. It is hoped that this course will lay the foundation that will inspire the student to visit France and participate in a study abroad program in college.

Course Prerequisites:
Openness to learn a new language and to experience some Francophone cultures

Latin I

Full Year Program
Grade Level: 9, 10, 11, & 12

Course Overview:
Through the reading-based text Latin for the New Millennium, first Year Latin introduces students to the fundamentals of Latin: correct classical pronunciation, a thorough survey of Latin grammar, translation of Latin into English and of English into Latin, and an acquaintance with the culture of the ancient Romans. First year Latin also introduces students to a myriad of Latin expressions found in law, medicine, religion, and politics and establishes a foundation of Latin roots used in English vocabulary. Primary sources such as inscriptions and *actual* Roman coins supplement textbook material.

Course Prerequisites:
Students need to recognize English parts of speech: verbs and their tenses, nouns, adjectives, adverbs, prepositions, and conjunctions.

Spanish I

Full Year Program

Grade Level: 9, 10, 11, 12

Course Overview:
Using the Immersion Method, the Questions and Responses Method, Reading, Writing and Grammar review, as well as the textbook Exprésate (Holt Rinehart Winston), the students learn the essentials of the Spanish language in order to communicate verbally and in written form in the target language.

Videos are used to acquaint the students with the geography, history, culture and people of various Spanish-speaking countries. Videos are also used to practice the material that has been covered in class by allowing the students to hear Spanish spoken by Native speakers in their native environments.

Course Prerequisites:
Openness to learn a new language and to experience some Hispanic cultures

French II

Full Year Program

Grade Level: 9, 10, 11, 12
Course Overview:
French II deepens the student's study of the French language and the Francophone culture. The student learns a more complex grammar in order to speak, read and write French more skillfully. The language lab enhances both oral and aural skills. An emphasis is placed on dialogues to broaden vocabulary and to gain fluidity of speaking. Films are used to introduce the student to the castles of the Loire Valley as well as popular films that have English subtitles. Research projects extend their familiarity with a Loire castle, other Francophone countries and a famous French person. The student is encouraged to be an active participant in hosting and visiting our sister school, Lycee Charles De Gaulle, in Dijon, France after mastering French II. This school-to-school exchange takes place every other year for 2 weeks in April and 2 weeks in June. The student is encouraged to travel to France or another Francophone country.

Course Prerequisites:
French I or the equivalent on the elementary level.

Latin II

Full Year Program

Grade Level: 9, 10, 11, & 12

Course Overview:
Second Year Latin teaches Latin grammar and history through the Latin for the New Millennium textbook series. Students learn the passive voice, the subjunctive mood, comparative and superlative adjectives, and participles. Students also study archaeology, daily Roman life, and the history of Rome

from the end of the Republic until the Early Empire.
Course Prerequisites:
Completion of Latin I and knowledge of the prerequisites thereof: verbs and their tenses, nouns, adjectives, adverbs, prepositions, and conjunctions. Students are expected to know correct classical pronunciation, to have a solid working vocabulary for translating Latin into English and English into Latin, and to have an acquaintance with the culture of the ancient Romans.

Spanish II

Full Year Program

Grade Level: 9, 10, 11, 12

Course Overview:
Using the Immersion Method, the Questions and Responses Method, Reading, Writing and Grammar review, as well as the textbook Exprésate (Holt Rinehart Winston), the students learn the essentials of the Spanish language in order to communicate verbally and in written form in the target language.

Videos are used to acquaint the students with the geography, history, culture and people of various Spanish-speaking countries. Videos are also used to practice the material that has been covered in class by allowing the students to hear Spanish spoken by Native speakers in their native environments.

Course Prerequisites:
Spanish I

French III

Full Year Program

Grade Level: 10, 11, 12

Course Overview:
French III continues to deepen the student's knowledge of the French language and the Francophone culture. Using a variety of texts and simple novels: TRESORS DU TEMPS and FRENCH THREE YEARS, the student learns a more complex grammar in order to speak, read and write French more skillfully. Popular and classic films are used to familiarize the student with a variety of spoken French. Weekly outside writing in a copybook and more reading in French is demanded, as well as more involved class conversation. Weekly listening comprehension and speaking sessions in the language lab deepens oral/aural skills. The student is encouraged to travel to France or another Francophone country and to aspire to take a study abroad semester in college.

Course Prerequisites:
French II

Spanish III

Full Year Program

Grade Level: 10, 11, 12

Course Overview:
Using the Immersion Method, the Questions and Responses Method, Reading, Writing and Grammar review, as well as the textbook Exprésate (Holt Rinehart Winston), the students learn the essentials of the Spanish language in order to speak, read and write Spanish more skillfully and effectively.

Videos are used to acquaint the students with the geography, history, culture and people of various Spanish-speaking countries. Videos are also used to practice the material that has been covered in class by allowing the students to hear Spanish spoken by Native speakers in their native environments.

Course Prerequisites:
Spanish 2

Latin III

Full Year Program

Grade Level: 11, 12

Course Overview
This course provides a survey of Latin literature. Students read selections from Catullus and Cicero's *Pro Caelio*. Students receive extensive practice in reading Latin passages and writing literal English translations. Students also demonstrate an understanding of the literature though discussion and written analysis. Special attention is paid to the use of meter and rhetorical devices by Latin poets. A firm understanding of the social, political, and cultural context of the late Roman Republic and early Empire plays a critical in the course.

Course Prerequisites
Successful completion of Latin II

AP French

Full Year Program

Grade Level: 11, 12

Course Overview:
French IV continues to deepen the student's knowledge of the French language and the Francophone culture. The student learns a more complex grammar in order to speak, read and write French proficiently. Preparation for the AP examination is a major component of the course. Popular and classic films are used to familiarize the student with a variety of spoken French. French is expected to be the language used in the classroom. At this level it is hoped that the student would have had the opportunity to visit France or another Francophone country. (A variety of texts are used: VAGABONDAGES LITTERAIRES, Barron AP French Preparation, an Amsco Workbook and various short novels.)
At times this course may be a tutorial or may be combined with French III or French V.

Course Prerequisites:
Subject to change according to new requirements from AP Central 2011-2012

- B+ average in Level III
- Strong commitment to vocab development and to speaking the language
- Strong commitment to deepening the use of complex grammar in written work
- Strong commitment to reading in the target language outside of class
- Strong commitment to listening to music, films in the target language

Course Objectives:
SPEAKING:

- To speak with ease about one's activities, future plans and feelings.
- To role play situations given in the AP practice books.
- To be able to communicate effectively with native French speakers both here and abroad.

LISTENING

- To discriminate the sense and conversation of the foreign language.
- To recognize the use of French in everyday situations and media.
- To practice the listening tapes and CD's for the AP exam.

WRITING/GRAMMAR:

- To learn more idiomatic expressions.
- To broaden their familiarity of irregular verbs.
- To review all the tenses and major grammatical functions.
- To demonstrate these grammar skills in workbook exercises as well as longer writing assignments.
- To write essays in French with ease and skill demonstrating the 11 points needed for the AP exam.

READING:

- To read the short stories and novels assigned.
- To read other outside readings from French periodicals and newspapers.

PROJECTS:

- To cook some French recipes and share with classmates and/or family
- To research a French literary artist and prepare the research half in French and in English.
- To prepare a project for the French exchange.

TECHNOLOGY:

- To use the language lab weekly to reinforce good speaking techniques and listening comprehension and to practice the oral story component of the AP exam.
- To use the CD's and tapes player to enjoy French songs.
- To use the VCR/DVD to extend each chapter's material and its use of French ads and interviews, as well as a full length film each quarter.
- To use the computers for research and for the preparation of other presentations and longer assignments.
- To e-mail the French correspondents from Dijon.

OPPORTUNITIES:

- To participate in the National French exam upon the recommendation of the teacher.
- To participate in the Regional Foreign Language Festival in the spring.
- To dine at a French Restaurant.
- To host a French student and to visit that student's school and home.
- To take the French Language AP exam.

AP Latin

Full Year Program
Grade Level: 11 & 12

Course Overview:
This is an Advanced Placement course on Vergil's *Aeneid* and Caesar's *De Bello Gallico*. As such, it encompasses the material demanded for an AP Course. Class work will include translation, discussion, and analysis of poetic themes and prose style and content.

Course Prerequisites:

- A- average in Latin III
- full understanding of Latin syntax
- commitment to understanding Latin poetry and prose
- commitment to understanding the social, political and economic climate of Rome prior to/during the reign of Augustus and how this relates to the Aeneid
- commitment to understanding poetic techniques and how Vergil implements them in the Aeneid
- commitment to understanding the Roman world of the late Republic, and political and military history

commitment to understanding the prose style of Caesar and its impact on later Latin

Course Objectives:
1. To fulfill all the required translation and reading for the AP course.
2. To enjoy and appreciate world-class pieces of literature.
3. To be able to scan and read Latin poetry.
4. To learn and be able to identify about 25 figures of speech.
5. To increase knowledge of mythology.

AP Spanish IV & V

Full Year Program

Grade Level: 11, 12

Course Overview:
By using both the textbooks, AP Spanish (Barron's), Ventanas Lengua (Vista), Nuevas Vistas (Holt) and the workbook Abriendo Paso Gramatica (Prentice Hall), the student prepares intensely for the AP Spanish examination by sharpening speaking, reading, writing and listening skills.

By using the textbooks, AP Spanish (Barron's), Nuevas Vistas (Holt) and Shaum's Spanish Grammar workbook, the student prepares intensely for the AP Spanish examination by sharpening speaking, reading, writing and listening skills. They will also receive supplemental material including, but not limited to, articles from newspapers and magazines, short stories and essays, online resources, authentic movies and music from Spanish speaking countries.
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The teacher will speak only Spanish in class, and all students are expected to do the same.

Course Prerequisites:

- B+ average in Level III
- Strong commitment to vocab development and to speaking the language
- Strong commitment to deepening the use of complex grammar in written work
- Strong commitment to reading in the target language outside of class
- Strong commitment to listening to music, films in the target language
- Teacher approval

Course Objectives:

SPEAKING:

- To be comfortable speaking at length on topics given by the teacher or class materials
- To improve musicality of tone, pronunciation, accuracy and ease of expression

LISTENING:

- To comprehend spoken Spanish for meaning and detail
- To understand accents and vocabulary from a variety of countries.
- To understand movies and music.

WRITING/GRAMMAR:

- To review all verb tenses and major grammatical functions
- To write essays in Spanish demonstrating the skill needed for the AP exam
- To acquire control over the written language, in the context of 200-word essays, fill-in-style grammatical exercises, and short-answer questions
- To describe, in detail, various pictures and drawings

READING:

- To comprehend written material in Spanish
- To understand classic Latin American and Iberian literature.
- To understand modern Spanish literature.
- To understand short stories.
- To understand modern articles from newspapers and magazines.

VOCABULARY:

- To increase vocabulary exponentially, in order to have more precise control over the language in its spoken and written form

TECHNOLOGY:

- To use the computers to gather information from websites about Hispanic countries and compile a research paper.
- To use the CD player to hear Hispanic speakers.
- To use the SmartBoard© to view authentic commercials, PSA's, movies, etc.

OPPORTUNITIES:

- To meet Native Spanish speakers from various countries.
- To participate in service projects with Spanish-speaking communities
- To write essays and original works of short fiction in Spanish.
- To participate in the Regional Foreign Language Festival in the spring.
- To take a field trip to be exposed to authentic Hispanic culture.
- To take the AP exam.

*Topics will vary from year to year, but generally include things such as technology, culture, history, science, art, etc. A 5th year of a foreign language may be offered at the teachers' discretion. Admittance into a 5th level language course is by invitation only.

Health & Fitness

PE/Health

Full Year Program

Grade Level: 9

Course Overview:
Physical Education is a fitness-oriented course. Students learn the fundamental rules and terms as well as the skills involved in various individual and team sports. Activities included are designed to promote interest in an active lifestyle.

Health is a required course as mandated by the Kentucky Department of Education. Students will study topics relating to social, mental, emotional and physical health.

Course Prerequisites:
There are no prerequisites for this course as it is a required course. Students are required to participate everyday. Uniform is shorts and short sleeve shirts (weather permitting). Sweats are permitted and suggested when the weather becomes colder.

Math

Algebra I

Semester Program

Grade Level: 9

Course Overview:
The course teaches the basic foundations of Algebra required for further study in mathematics. Specific topics include expressions, equations, inequalities, relations and functions, analyzing linear equations, graphing, linear systems, polynomials, factoring, quadratic functions and equations, radical expressions, triangles, and radical equations.

Course Prerequisites: Pre-algebra or Fundamental mathematics

Course Objectives: Overall objectives are: (1) To strengthen student knowledge of fundamentals of algebra, enabling them to solve problems. (2) To use the language of algebra to communicate mathematically. (3) To understand the relationship of algebra with other mathematic subjects, especially geometry and basic trigonometry. (4) To demonstrate the connection to the "real world" and career exploration. (5) To prepare adequately to continue into the second year of algebra.

Algebra II

Full Year Program

Grade Level: 9, 10, 11

Course Overview: The course builds upon fundamentals learned in Algebra I. Algebraic concepts are explored and analyzed verbally, numerically, graphically and symbolically. Specific topics covered include equations and inequalities, linear relations and functions, systems of equations, matrices, polynomial functions, rational functions, quadratic functions, radical expressions and equations, imaginary and complex numbers, conic sections, exponential and logarithmic functions, and trigonometry.

Course Prerequisites: Algebra I

Geometry

Full Year Program

Grade Level: 9, 10, 11

Course Overview: Students will be taught how the world of geometry and its physical attributes relate mathematics to the real world applications from which it is built. Geometrical shapes, lines, space, constructions of the physical concepts of the course, and the theory and proof of these theories are the central focus of the course.

Course Pre-requisites: Algebra I

Pre-Calculus Honors

Full Year Program

Grade Level: 10, 11, 12

Course Overview: Students will be able to discover and analyze algebraic, graphical and numeric characteristics of linear, polynomial, rational, exponential, logarithmic and trigonometric functions in order to create and interpret mathematical models of real world phenomena. Student will also explore other topics such as polar coordinates, combinatorics and probability. While many of these topics have been covered in previous math courses, this course will cover them in greater detail and depth and focus more on the analysis of the algebraic concepts. Students taking Precalculus Honors should have an exceptional understanding of mathematics and be willing to move at a fast pace as this course is designed to prepare a student for college calculus.

Course Prerequisites: Algebra I, Algebra II, Geometry, recommendation of teacher and AP potential from standardized tests will be considered by the department, but will not be a guarantee to get in or be kept out of a class.

AP Calculus I

Full Year Program

Grade Level: 11,12

Course Overview: Functions are presented graphically, numerically and analytically. Limits and continuity are studied, leading to the development of the derivative. The concepts of a derivative as a rate of change and as a linear approximation are used to solve problems. Integrals are developed from the Reimann sum and are applied to various problem situations. The Fundamental Theorem of Calculus gives the relationship between the derivative and the definite integral.

Course Prerequisites: Successful completion of 4 prerequisite classes (Algebra I, Algebra II, Geometry, Pre-Calculus) with a Test/Quiz average of at least a B (not just an average in the class of B), Teacher recommendation, AP potential from standardized tests will be considered by the department, but will not be a guarantee to get in or be kept out of the class.

Course Objectives: Students will prepare for success on the AP Calculus Exam.

Course Content: (Following the Topical Outline for Calculus AB Advanced Placement Program)

Limits of Functions

- An intuitive understanding of limits
- Calculating limits using algebraic manipulation
- Estimating limits from graphs and tables of data

Asymptotic and Unbounded Behavior

- Understanding asymptotes in terms of graphic behavior
- Using limits involving infinity to describe asymptotic behavior

Continuity

- An intuitive understanding of continuity
- The Continuity Test
- Intermediate Value Theorem and Extreme Value Theorem

Derivatives

- Derivative presented graphically, numerically and analytically
- Derivative interpreted as instantaneous rate of change
- Derivative defined as the limit of a difference quotient
- Relationships between differentiability and continuity
- Tangent lines and linearization
- Differentiation Rules: sum, difference, product, quotient
- The Chain Rule
- First Derivative Test
- Mean Value Theorem
- Second Derivative Test and points of inflection
- Problems involving rate of change, related rates and optimization
- The derivative as a rate of change as applied to velocity, speed and acceleration
- Implicit differentiation
- Derivatives of trigonometric, inverse trigonometric and logarithmic functions

Integrals

- Computations of Riemann sums
- The definite integral as the limit of the Riemann sums
- The Fundamental Theorem of Calculus
- Techniques of antidifferentiation: following directly from derivatives of basic functions, using substitution, using trigonometric identities
- Initial value problems
- Differential Equations and Slope Fields
- Average value of a function
- Solving differential equations by separation of variables
- Finding area between curves
- Finding volumes of solids of revolution using Disk, Washer and Shells methods
- Using Riemann sums, Trapezoid Rule and Simpsons Rule to approximate integrals of functions expressed algebraically, graphically and by tables of values

AP Calculus II

Full Year Program

Grade Level: 12

Course Overview: Material from Calculus I is reviewed and reinforced. Further techniques of integration are studied as well as indefinite integrals. Sequences and series are covered, including convergence and

divergence, and Taylor and Maclaurin series. Derivatives and applications of parametric, polar and vector functions are studied.

Course Prerequisites: Successful completion of Calculus AB and a 3 or better on the AP Calc AB Exam

Course Objectives: Students will prepare for success on the AP Calculus Exam.

Course Content: (Following the Topical Outline for Calculus BC Advanced Placement Program)

Integrals

- Antiderivatives by substitution of variables, parts, partial fractions
- Improper integrals
- Length of a curve
- Solving logistic differential equations

Polynomial Approximations and Series

- Series defined as a sequence of partial sums
- Series convergence and divergence
- Geometric series and applications
- Harmonic series
- Alternating series
- Tests for convergence and divergence: integral test, p-series test, ratio test
- Taylor series
- Taylor polynomial approximations
- Maclaurin Series (Taylor series centered at x = a)
- Maclaurin series for special functions
- Functions defined by power series
- Radius and interval of convergence of power series
- Lagrange error bound for Taylor polynomials

Parametric, Polar and Vector Functions

- Analysis of planar curves given in parametric, polar and vector form
- Derivatives of parametric, polar and vector valued functions including applications
- Velocity and acceleration vectors

Math Topics

Full Year Program

Grade Level: 12

Course Overview: Various topics are presented including, area and volume, number theory topics, probability, statistics, fractals, sequences, series, geometric transformations, regression equations, history of mathematics, trigonometry and non-Euclidean geometry. Applications of problem solving are stressed in each area of study. Time is also spent practicing and reviewing for ACT and SAT tests and college placement exams.

Course Prerequisites: Algebra I, Algebra II, Geometry, recommendation of teacher

Science

Chemistry

Full Year Program

Grade Level: 9
Course Overview:
The course is designed as a college-prep chemistry course. It is taught at the early level so students have a chemistry background for the study of biology. The following topics are emphasized: Lab design, scientific method, measurement, properties of matter, atomic theory, electron configuration, periodic table, bonding, molecular geometry, intermolecular forces, formulas and names of compounds, chemical reactions, stoichiometry, kinetic theory, states of matter, gas laws, solutions, acids, introduction to nuclear and to organic chemistry. Woven into the program are topics in kinetics, equilibrium, thermodynamics, redox reactions, descriptive chemistry, careers and the benefits and hazards of chemicals. Support for the mathematics of chemistry is supplied throughout the course.

Laboratory work includes (in part): designing an experiment, weighing, using a Bunsen burner, separating by physical and chemical means, analyzing using flame tests, working with models, identifying precipitates, determining empirical formulas, discovering Boyle's Law and Molar Volume, comparing chromatography techniques, investigating acids, bases and determining pH, manufacturing an organic flavor, manufacturing and testing polymers and simulating nuclear decay.

Course Prerequisites:
Students are concurrently taking a course in Algebra 1 or a higher level math course.

Course Objectives:

- To understand chemistry at work in our self and in our surroundings.
- To build a foundation for future study in science.
- To generate enthusiasm for the fascinating world around us and for the laws that governs it.
- To study about the people who are at the basis of our knowledge and how their advances in thinking, designing technology and doing research have brought us to our great knowledge.
- To analyze and interpret graphs and diagrams and use tables to access information.
- To provide a variety of techniques that enables a student to become an independent learner.
- To provide ample laboratory experiences that demonstrates the joy of investigation and the importance of scientific investigation in our present and future knowledge.
- To encourage competency and provide opportunities for students to be competent in a variety of lab experiences.
- To promote teamwork and cooperation among a variety of personalities through cooperative learning and changing laboratory teams.

Biology

Full Year Program

Grade Level: 10

Course Overview:
The course teaches the basics of:

- Biochemistry: carbon chemistry, carbohydrates, lipids, proteins and nucleic acids
- Cellular biology: anatomy and physiology of prokaryotic and eukaryotic cells
- Genetics: DNA, RNA, genes, chromosomes and their processes
- Evolution: Darwinian theory
- Classification: domains, kingdoms and their members
- Human systems: comparative study of anatomy and physiology
- Environmental biology: major biomes and interactions of organisms

Course Prerequisites: Chemistry

Physics

Full Year Program

Grade level: 11, 12

Course Overview:
This course is designed as a college-prep physics course. The emphasis is conceptual but mathematics is used to support the concepts throughout the course. Laboratory investigations and demonstrations accompany all topics. Three "Olympic" events are included each quarter.

The topics included in the first and second quarters are: nature of physics, discovery of physical laws, velocity, acceleration, vector systems, forces, Newton's laws, projectiles, circular motion, conservation of momentum and energy, work, and power.

The third quarter includes harmonic motion, waves and the properties of reflection, refraction, interference, diffraction, resonance and the Doppler effect. Sound, music, light, mirrors, lenses, polarization are the vehicles through which understanding of these properties is achieved. The fourth quarter includes studies of static electricity, electrical fields, electrical circuits, magnetic fields, motors and generators.

Course Prerequisites:
Algebra 1 and Algebra 2 or Geometry

Course Objectives:

- To develop an understanding of fundamental physical principles.
- To create a climate of awe and appreciation of the workings of our world and of the workings of scientific investigation in the past and the present.
- To provide opportunities to tackle problems and achieve unique solutions.
- To carry out investigations through traditional laboratory techniques.
- To develop facility with computer-assisted data collection and analysis.
- To provide a variety of experiences which support and expand the various talents of the participants.

- To promote cooperation in learning and in problem solving.

AP Chemistry

Full Year Program

Grade Level: 11,12

Course overview: a comprehensive first year college chemistry course following the guidelines of the Advanced Placement program. Topics include: atomic and molecular structure, stoichiometry, electrochemistry, thermochemistry, nuclear reactions, and equilibrium.

Prerequisites:
- 'A' in general chemistry
- Strong math background
- Completed or is currently taking pre-calculus
- Willingness to do a lot of homework problems
- Willingness to attend after school labs every couple of weeks on Monday
- Interest in chemistry
- Recommendation of science teacher

Course Objectives:
- To develop deeper understanding of concepts learned in high school chemistry
- To learn high level problem solving skills to be used on the AP exam
- To become familiar with the periodic table of elements and their properties
- To develop independent learning skills
- To be prepared for the AP chemistry exam
- To be prepared to enter a second year college chemistry course

AP Biology

Full Year Program

Grade Level: 11, 12

Course Overview:
The course is a college level biology course for majors. It meets the criteria for Advanced Placement Biology and exceeds it in laboratory content. The course meets five hours a week plus an additional three hours after school for the laboratory. Topics include molecular and cellular biology, genetics, evolution, and systems of living organisms, behavior, populations, and ecology. Themes of unity in diversity, relationship of form and function, interdependence, continuity and change, regulation, energy flow and the role of scientific investigation flow through the presentations and investigations.

Course Prerequisites:
- 'A' in general biology
- Willingness to read high level texts and articles
- Willingness to attend after school labs every couple of weeks on Mondays
- Willingness to work hard
- Recommendation of biology teacher

Course Objectives:

- To give the students a rigorous solid foundation in higher level biology.
- To meet criteria of College Board that those who choose to take the AP test will be adequately prepared.
- To continue to develop student self sufficiency in learning more advanced topics
- To achieve awareness of the impact of modern science on our lives as displayed in the media
- To achieved success in the laboratory experiences utilizing modern technology such as CBL probes.
- To provide laboratory procedures that demonstrate the variety of techniques and approaches required for study of living organisms.
- To promote a love of our world and an appreciation for the study of it's many complexities.

AP Physics

Full Year Program

Grade level**:** 12

Course overview: Topics include mechanics, fluids, heat, electricity, magnetism, waves, optics, atomic and nuclear physics--the heart of a first year college course. The requirements of the Advanced Placement Physics B course will be utilized.

Course Prerequisites:

- Completion of high school physics
- Comfortable with Algebra and Trigonometry
- Enjoys problem solving, willing to work in group with other students, willing to do lots of homework-up to an hour per evening
- Conversation with the instructor before admission into the class

Course Objectives:

- Learn concepts that govern the physical world
- Stretch imagination and creativity
- Improve problem-solving skills
- Understand and practice laboratory investigations in the pursuit of truth
- Utilize technology skills in lab data collection and analysis
- Prepare for the national AP exam

Science Topics

Full Year Program

Grade level**:** 12

Course overview: Seminar style class covering various science topics, including but not limited to astronomy, anatomy, environment, biomedicine, and others.

Course Prerequisites:

- Three science credits

- Interest in current science research and topics
- Ability to research
- Ability to analyze data

Course Objectives:

- Expand scientific knowledge
- Build research skills on current science topics
- Use technology to expand scientific research

Social Studies

Economics

Semester class

Grade level: 11-12

Quarter 1 Overview:
Microeconomics examines how individuals make choices with limited resources. Students will explore concepts like supply and demand, factors of production, roles of labor and management, the relationship between industry and the environment, and the impact of government action on individuals.

Quarter 2 Overview:
Macroeconomics explores the way that market economies solve the problem of scarcity, as opposed to individuals. Economies work as a web, and students will analyze the relationships between ideas like national income, employment, inflation, and money supply. We'll work to debate the role of government spending, taxation, international finance, economic development, and global trade.

Course Prerequisites: none, this is an elective course

Global Politics

Semester class

Grade level: 11-12

Overview:
Global politics explores the ways that cultures and nation-states interact with each other. Students will explore ways of viewing the global network of states, and methods for analyzing states as world actors. Physical geography will be stressed, as well as comparative forms of government. Above all, students will analyze the role of history and culture in defining national interaction. A semester-long project will include students role-playing individual nations, exploring their interests and responses to crisis and difficulty.

Course Prerequisites: none, this is an elective course

American History

Full Year Program

Grade Level: 11

Course Overview:
American History is taught as a survey course covering prehistory through present day America. Class

will focus on periods of conflict, change, and revolution at social, political, economic, and military levels. Students will be able to discuss, define, and synthesize ideas in a historical basis from several points of view in American History. One of the major focuses of this class is the review of primary source documents from American history and the completion of a thesis paper.

Course Prerequisites:
This is a required course unless a student takes AP United States History.

AP American History

Full Year Program

Grade Level: 11th/12th

Course Overview:

This course uses a chronological approach to focus student analysis on the issue of change over time. The students will be able to judge and evaluate history with an overview of social, political, and economic perspectives. Revisionist history will be evaluated as well as interpretive history with it emphasis on primary sources. In addition to class lectures and notes, students will have read: *A Brief History of the United States, Killer Angels*, and a number of primary and secondary historical texts. The College Board approved text is The American Pageant.

Course Prerequisites:

Students will need a recommendation from the Social Studies Teacher of World Cultures and Geography. This will be judged on the success of the student in history as well as an interview with the A.P. teacher as a result of the PLAN test. The recommendation of the Advanced Placement Board is to limit the size of the class. The ultimate goal of the course is to have the student feel successful in the program as well as passing the A.P. Test satisfactorily to achieve college credit per the University or College that students plan to attend. The student should have a B or B+ in World History and commit to ½ hour reviews after school at least one day/week.

Objectives

- To conceptualize history as a continuation of specific events, time frame, and personage
- To appreciate the ways in which American politics and culture have changed over time
- To apply critical reasoning and logical arguments to positions, dismantle fallacious ideas, and strengthen student own opinions rationally
- To compare and contrast specific documents and other primary sources, presenting the background, philosophy, and objectives of the authors.
- Through inductive reasoning, to draw their own conclusions about events and incidents and compare their research with historians.
- To discuss with conviction, and based on research, specific aspects of American History – the background, philosophy, and significance of the era.
- To use primary cultural and political sources as a tool for interpretation and historical

significance.

- To read and perceive the importance and significance of certain historical documents and write an essay addressing the background and issues of the documents as well as their intent. They will then be able to address the consequences of the documents through essays and oral discussions as they become conversant with the document based questions.
- To familiarize themselves with outstanding Americans and give their contributions to American History.
- To compare and contrast different historical interpretation
- To analyze historical evidence with documentation from government and non-government resources (*Library of Congress, Presidential Libraries,* and the *National Archives)*
- To develop the ability to create their own document based question with adequate documentation for support
- To appreciate the greatness of their country and an admiration for its people and their contributions.

AP Psychology

Full Year Program

Grade Level: 11,12

Course Overview: Advanced Placement Psychology is taught as a year long introduction to the methods, theories, and practical applications of psychology and related social sciences. Students will receive an extra .5 credit for taking this course and will be eligible to take the AP Psychology exam at the end of the year. Classes will engage in social and psychological lab work testing perception, behaviorism, cognitive development, and other psychological phenomenon. All students are expected to keep a notebook of vocabulary, lab works, and reading notes from supplemental readings. Guest speakers may be used from time to time to provide a real world look at the applications of psychology.

Course Objectives include:

16) To realize and understand the history and progress of psychology as a science
17) To gain critical thinking skills via analysis of past experiments and case studies
18) To understand some basic brain chemistry and physics
19) To gain a respect for the appropriate uses and ethical structures of psychology
20) To work successfully in groups with experiments, presentations, and projects
21) To appreciate the founding fathers of psychology and the contributions they have made in establishing psychology as a science.
22) To analyze and understand psychological concepts.
23) To be able to support statements and generalizations with the use of psychological facts and details.
24) To prepare for the AP exam

Course Prerequisites:
Students are in good standing academically and committed to the challenge of Advanced Placement classes. Students should also get approval from the teacher to join the class.

American Government

Semester Program

Grade Level: 11/12

Course Overview:
American Government is taught as a survey course in the history, function, ideology, and operation of the republican principles used to operate our country. Students will be able to understand and analyze the importance of participation in our government and the responsibilities of civic virtue.

Course Prerequisites:
None, this is an elective course

Objectives

1) To understand the fundamental principles behind the establishment of the federal government.
2) To gain a working knowledge of the values of compromise.
3) To gain critical thinking skills and logic as they apply to the social contract.
4) To show the separation of power within the federal government.
5) To make sense of visual, audio, and physical materials as presented
6) To use the library and Internet as a resource to build on the knowledge presented in class.
7) To develop a spirit of openness to controversy so as to understand and appreciate the bigger problems facing the American citizenry.
8) To develop critical thinking skills through case studies and practice.
9) To be able to support statements and generalizations with the use of historical facts and details.

Sociology

Semester Program

Grade Level: 11/12

Course Overview:
Sociology is taught as a semester long survey of the interactions between people and society. Students will gain a greater appreciation for people as a social species. Students will gain sociological perspective and insight to varying social issues. A series of guest speakers will be introduced to enhance the program and challenge the students.

Course Prerequisites:
None, this is an elective course

Objectives

1) To realize and understand the reasons why peoples act in the manner they do in social settings.
2) To gain critical thinking skills via analysis of the world around them.
3) To search out and explain social injustices surrounding their world
4) To gain empathy for human kind
5) To work toward achieving cultural relativity
6) To gain an appreciation for other cultures in a value free judgment.

7) To lead a class presentation and discussion on a topic of the students' choice pertaining to a sociological issue.
8) To appreciate the founding fathers of sociology and the contributions they have made in establishing sociology as a science.
9) To analyze and understand sociological concepts and synthesize examples from the surrounding environment.
10) To be able to support statements and generalizations with the use of sociological facts and details.

TMC European History

Full Year Program

Grade Level: 11, 12

Course Overview:
This course is taught be a Thomas More College professor. Students who successfully complete this course over both semesters will receive a total of 6 credits. Students should check with the college that they plan to attend to be sure that these credits will transfer. During this course students will study the history of Europe through the examination of historic figures from 1500- modern times.

Prerequisites:
- B or B+ average in Instructor Burden's/Cordonnier's social studies class
- Approval from social studies teacher
- Writing sample submitted to TMC professor

Theology

Grade Level: 9-12

Overview:
Beginning with the 2007-2008 school year, Villa Madonna Academy will implement the new diocesan religion program. Alls high schools in the diocese will be teaching the same courses from the same text books. These books are from the *Didache* Series published by the Midwest Theological Forum.

The *Didache* is the teaching of the Apostles and, as such, it is the teaching of the Church. Accordingly, this book series makes extensive use of the most recent comprehensive catechesis provided to us, *The Catechism of the Catholic Church* .The *Didache* series also relies heavily on Sacred Scripture, the lives of the saints, the Fathers of the Church, and the teaching of Vatican II as witnessed by the pontificate of John Paul II.

Supplemental materials and resources have been approved by the Diocesan Department of Catechesis and Formation.

Course Prerequisites:

Successful completion of each course is required to proceed to the following year's course. The following courses will be taught:

Introduction to Catholicism

Grade Level: 9

Course Overview:
Introduction to Catholicism is a course that sets out the basics of why we are here and where we are going. Every baptized person has been called personally to serve God and love his/her neighbor. The obligation of each person is to discover through prayer and spiritual direction what role he or she is expected to play in God's plan of salvation.

Understanding the Scriptures

Grade Level: 10

Course Overview:
Understanding The Scriptures focuses on covenant. Covenant is the handle that helps one grab hold of all the vital history contained in the Bible. God's covenant with humanity defines the "story line" that holds all of Scripture together, from beginning to end.

The History of the Church

Grade Level: 11

Course Overview:
The History of the Church is an account of Christian History based solidly on historical fact viewed through the eyes of faith, by which the students will see both his/her visible and spiritual reality as bearer of divine life. The book delves deeply into the heroic lives of the saints and the tremendous achievements of the Church, and will bring those who read it to a deeper understanding of Christ and his calling for a new evangelization.

Morality

Grade Level: 12

Course Overview:
Course Description: Morality focuses on the intellectual, moral, and formational developement in living a life joined to the Mystery of our Lord. This foundation affords the Christian with the only true alternative to a world which often rejects the spiritual and substitues its own brand of convenience for that which is "right" and "true". The foundation of the course is Christ and his church.