

# **Mater Dei High School**

## **Course Offerings**

**2010-2011**

# MATER DEI HIGH SCHOOL

## Course Offerings

### General Information

Your high school years will be as valuable as you make them. Look through this Course Offerings Guide and study the courses that are available to you at Mater Dei High School.

You are urged to choose your program of studies for next year carefully and, while you do so, to keep in mind the following guidelines:

1. It is important for you to make firm decisions about courses you wish to take.
2. With the help of parents, counselors, and teachers, you will choose courses which will be most helpful in preparing for the goals you wish to attain upon graduation.
3. Placement is based on prerequisites as outlined throughout the Course Offering Guide.
4. Scheduling conflicts can occur. Be certain, therefore, that your ALTERNATE CHOICES are REALISTIC and are what you would like to have even as a second choice.
5. Having chosen your courses for next year, you are not expected to request a change of schedule without a serious reason. Changes are made for sound educational reasons. All course change requests must be made by the end of the first week of school.

### Requirements for Graduation

1. 4 Years of Religion including a required yearly retreat and 80 hours of Christian Service  
4 Years of English  
2 Years of U.S. History  
1 Year of World History or The History of Western Civilization  
3 Years of Science including Biology  
3 Years of Mathematics  
2 Years of the same World Language by recommendation  
1 Year of Fine, Visual/Performing, and/or Practical Arts  
1 Year of Physical Education  
1 Year of Health / Driver Theory
2. A minimum of 120 credits.
3. **Seniors must successfully complete all courses in order to graduate with their class.**  
Any senior who has not met all the requirements for graduation may not participate in the ceremony.
- 4.. Beginning with the class of 2014, all students will have the opportunity to earn college credits.



A failure in any subject must be made up in summer school or by a tutor certified in the subject failed before a student will be permitted to return to Mater Dei High School. If a student should transfer to a public school, the tutored course may not be accepted for credit. If the course is not being offered in any area summer school, or special circumstances warrant, the administration may waive this rule.

A student must have earned:

30 Credits to be considered a Sophomore

60 Credits to be considered a Junior

90 Credits to be considered a Senior

### Requirements for College Admission:

Most colleges require a minimum of sixteen units of college preparatory subjects including three units of college prep math and two units of laboratory science. A minimum of sixteen subject units must be completed according to the following breakdown:

English - 4

Mathematics - 3

Science - 3

Social Studies - 3

Electives -5

(in English, Science,  
Social Studies, Math, or  
World Language)

### Grade Equivalents:

To obtain letter grades for quarter marks and exams, the following system is used:

97 - 100 = A+

93 - 96 = A

89 - 92 = B+

85 - 88 = B

80 - 84 = C+

75 - 79 = C

73 - 74 = D+

70 - 72 = D

0 - 69 = F

### Class Rank

The reporting of class rank is optional. The class rank is computed by cumulative grade point average on all subjects from ninth grade through first semester of twelfth grade. Subjects are weighted according to the level of difficulty of each course. Rank is calculated on final grades. Summer school grades and grades from other schools are not considered. The formula for the computation of the weighted GPA is quality points divided by credits attempted.

### Courses and Quality Points:

Advanced Placement Classes

A+ = 12    A = 11    B+ = 10    B = 9    C+ = 8    C = 7.5    D+ = 7    D = 6.5    F = 0

Honors Classes

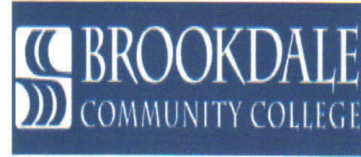
A+ = 10    A = 9    B+ = 8    B = 7    C+ = 6    C = 5.5    D+ = 5    D = 4.5    F = 0

A Classes

A+ = 8    A = 7    B+ = 6    B = 5    C+ = 4    C = 3.5    D+ = 3    D = 2.5    F = 0

B Classes

A+ = 6    A = 5    B+ = 4    B = 3    C+ = 2    C = 1.5    D+ = 1    D = .5    F = 0



### **DUAL ENROLLMENT PROGRAM**

The Dual Enrollment Program at Brookdale Community College allows qualified Mater Dei High School juniors and seniors to enroll in college courses and simultaneously earn credit toward a high school diploma and a postsecondary degree. The goal of the Dual Enrollment Program is to give qualified high school students the opportunity to experience college courses and prepare for the academic rigor of college. The applicants must be recommended and approved by their high school Student Services Counselor and have the consent of a parent/legal guardian. Applicants must meet minimum proficiency requirements on the Accuplacer or SAT's. To remain in the program, the student must maintain a minimum GPA of 2.0 at Brookdale Community College.

Applicants are required to submit a student privacy waiver in order for academic and conduct information to be shared between Brookdale Community College and Mater Dei High School. Applicants are allowed to enroll in no more than two Brookdale courses during any term. Enrollment is subject to the guidelines of the Brookdale Community College prerequisite and co-requisite system. Applicants may not enroll in selective admission programs, basic skills, or support courses.

Qualified Mater Dei juniors and seniors may be released from Mater Dei High School for half a day to take college-level courses at Brookdale Community College in the Dual Enrollment Release Program. This is contingent upon the student's schedule and fulfillment of Mater Dei High School graduation requirements. Students may take courses afterschool or in the evening.

This program was developed and implemented in the fall of 2004 in response to the 12<sup>th</sup> Grade Option initiated by the New Jersey Department of Education. Mater Dei High School has participated in the Dual Enrollment Program since the fall of 2009.

Students participating in the Dual Enrollment Release Program are responsible for all costs associated with attending Brookdale Community College including tuition, books, fees, course materials, and transportation. Mater Dei students who provide the Mater Dei High School Student Services Office with proof of successful completion of the course and earn a grade of "B" or better will be reimbursed 75% per credit. Students taking a course at Brookdale Community College after school or in the evening may opt for a semester study. Brookdale Community College courses will be listed on the Mater Dei High School transcript as enrichment. Students will receive official college credit from Brookdale Community College.

## RELIGION

**CATHOLIC CHRISTIANITY** - 2 semesters. Prerequisite: None. This introductory course provides an integral survey of basic doctrinal beliefs while assisting students who come from diverse religious backgrounds. Adolescent development, communal worship and the moral principles of the Roman Catholic Church are explored. This course allows all freshmen to begin their high school religious studies program with the same basic formation.

**CHRISTIAN MORALITY** - 2 semesters. Prerequisite: None. This course helps students achieve a greater awareness and understanding of the decision making process and the formation of an individual's conscience. This course will explore the contemporary issues that are relevant to young people today.

**CHRISTIAN SERVICE** - Prerequisite: None. This eighty hour graduation requirement is designed to provide an opportunity for students to respond to the Gospel message through community action selected by the student under the supervision of the religion department. Areas of service include: volunteering in a hospital, working with the elderly, teaching religious education, tutoring, assisting teachers, coaching and supervising recreational programs.

**CATHOLIC SOCIAL TEACHING** - 1 semester. Prerequisite: None. This course strives to prepare students to fully participate in the social structure of our modern world in a way that seeks to create justice for all. Students will discuss the religious implications of various social issues including: poverty, war and peace, the environment, capital punishment and euthanasia as they relate to the fundamental issues of human rights and social justice. The first quarter will focus on the history of Catholic Social Teaching. The second quarter of this course will focus on applying these historical techniques to contemporary issues in our society.

**CHURCH HISTORY** -1 semester. Prerequisite: None. This course will explore the theological developments of the church from The New Testament period to the contemporary era.

**MARIOLOGY** - 1 semester. Prerequisite: None. This course will provide the student with the opportunity to study Mary, Our Spiritual Mother, through learning about Marian doctrine and devotion. The course will further explore Mary's influence in the Roman Catholic Church based on tradition and scripture.

**PEER COUNSELING 1** -1 semester. Prerequisite: Minimum GPA of 2.0, teachers' recommendation, approved attendance and discipline record, detailed essay, personal interview and a commitment to serving others. The Peer Counseling Program equips students with the life skills needed to be successful in their daily lives. This program helps to motivate and teach students how to minister to their peers in Christian faith and strives to develop young people as leaders.

**PEER COUNSELING 2** - 1 semester. Prerequisite: Successful completion of Peer Counseling 1. This practicum involves seniors working directly with small groups of freshmen as student advisors in order to assist the freshmen in making a smooth transition into high school.

**RELIGIONS OF THE WORLD** - 1 semester. Prerequisite: None. This course will explore the religious experiences and expressions of ancient and primitive people with a special focus on the development of religion. The students will study the major religions of the world including: Hinduism, Buddhism and Islam. Emphasis will be placed on how other religious beliefs compare to Christianity. This course will give particular attention to the exploration of religious communities and how the individual understands the divine, the human experience and the world.

**SCRIPTURE** - 1 semester. Prerequisite: None. This course offers a comprehensive examination of the Scriptures and their relation to the Catholic Church.

**THANATOLOGY 1** - 1 semester. Prerequisite: None. This course is based on the concept that a greater understanding of death leads to a deeper appreciation of life. It focuses on the Christian concept of death and contemporary questions surrounding death. The first quarter of this course will explore historical concepts of death and dying. The second quarter will present students with healthy and productive ways for dealing with suffering and pain.

## RELIGION (continued)

**THANATOLOGY 2** - 1 semester. Prerequisite: Thanatology I. This course provides a basic background on historical and contemporary perspectives on suffering and death. Attention is given to current American practices regarding death, as well as cross-cultural interpretation. Students will examine religious traditions and customs regarding death and afterlife. PowerPoint presentations, videos, and classroom discussion will guide the student through the development of our understanding of mortality, afterlife, burial customs, bereavement and the nature of Christian hope.

**THEOLOGY OF THE BODY** - 1 semester. Prerequisite: None. This course is based on The Theology of the Body, Pope John Paul II's integrated vision of the human person-body, soul and spirit. As the Pope explains, the physical human body has a specific meaning and is capable of revealing answers regarding fundamental questions about us.

## ART

**ART APPRECIATION** - 1 semester. Prerequisite: None. This course is designed to introduce students to art criticism, history and aesthetics through the study of influential historical and contemporary artists.

**ART AND INTERACTION** - 1 semester. Prerequisite: None. This course provides background, context and practical experience in the combined use of art and social interaction. Study emphasizes the value of art education and art therapy. Course material includes projects in drawing, design, sculpture and crafts for group field work with two selected areas: education and the elderly or deprived youth.

**ART FUNDAMENTALS 1** - 1 semester. Prerequisite: None. The main objective of this course is to provide a general introduction to the fine arts. Students will learn the fundamentals of drawing, mixed media and art history through the Middle Ages. Students will work in a variety of media and techniques.

**ART FUNDAMENTALS 2** - 1 semester. Prerequisite: Successful completion of Art Fundamentals 1. This course expands on the materials and techniques learned in Art Fundamentals 1 and continues the art history component from the Renaissance to the present.



**APPLIED ARTS** -1 semester. Prerequisite: None. This course introduces students to the techniques and materials used in a variety of crafts. Emphasis is placed on skill development and procedure. Projects vary but may include printmaking, screen printing, basketry, textiles and tie dye.

**GRAPHIC DESIGN** - 1 semester. Prerequisite: Successful completion of Art Fundamentals 1. Upon successful completion of this course, students will have an in-depth knowledge of standard graphic applications such as Adobe Photoshop, Illustrator and InDesign for professional desktop publishing training. Materials: flash drive portable storage device.

**PAINTING 1** - 1 semester. Prerequisite: None. This course is designed to introduce students to the various types of painting media including acrylic, oil and watercolor.

**PAINTING 2** - 1 semester. Prerequisite: Painting 1. This course expands upon materials and techniques learned in Painting 1 and further develops painting skills in oils and our lives.

**PHOTOGRAPHY** - 1 semester. Prerequisite: None. Students will learn to express themselves within the medium of photography. They will learn the basic elements and design principles that are essential for creating a successful visual image. Specifically, students will work with composition, space, balance, line and value. Required materials: a 35mm or digital camera and flash drive portable storage device. Students will be responsible for the purchase and processing of their assignment film, prints, and enlargements.

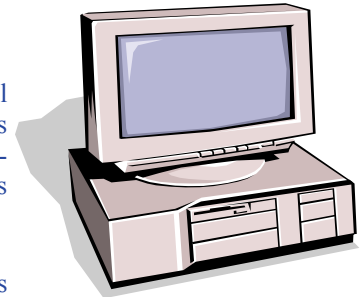
## ART (continued)

**PRINTMAKING** - 1 semester. Prerequisite: None. This course will introduce students to various printmaking media and techniques including intaglio, wood block printing, linoleum block printing, mono printing and screen printing. Students will have the opportunity to learn about the history of printing, as well as create a strong portfolio.

**SCULPTURE** - 1 semester. Prerequisite: None. This course is designed to introduce students to the basic fundamentals of sculpture utilizing clay and plaster media, sculpture in the round, one and two part plaster molds and latex molds.

## COMPUTER SCIENCE

**APPLIED TECHNOLOGY** - 1 semester. Prerequisite: None. Students will learn essential hardware and system analysis skills. This project-based learning class transitions students from fundamental hardware construction to mechanical and software applications. Students work in conjunction with campus technology professionals in diagnostic and applied uses of technology.



**COMPUTER PROGRAMMING 1** - 1 semester. Prerequisite: None. This course teaches students to write and design computer programs using True Basic. Emphasis is placed on problem solving, communication skills, and programming language. Topics include arithmetic operations, character and string manipulation, all types of looping, functions, programming style and menu programming.

**COMPUTER PROGRAMMING 2** - 1 semester. Prerequisite: Successful completion of Computer Programming 1. Students will learn to write complex computer programs using the skills acquired in Computer Programming 1. The emphasis is on graphics programming.

## ENGLISH

**FUNDAMENTALS OF WRITING** - Prerequisite: By placement. This course will provide students with an overview of the fundamentals of effective writing. The emphasis will be on utilizing the writing process to develop clear, well-organized, and mechanically acceptable five paragraph essays.

**ENGLISH 1 GENRE** - 2 semesters. Prerequisite: By placement. This genre course will include the short story, non-fiction, the novel, mythology, drama, self-expression and poetry. Students will focus on language and reading skills. This course will introduce students to the process and writing of a research paper.

**ADVANCED ENGLISH GENRE** - 2 semesters. Prerequisite: For the class of 2014, by placement or "B" in American Literature Honors 9. This genre course will include the short story non-fiction, the novel, mythology, drama, self-expression and poetry. Student will focus on language skills and will discuss literary devices. Students will write more involved expository and research based essays as well as further develop their critical thinking skills. A research paper is required.

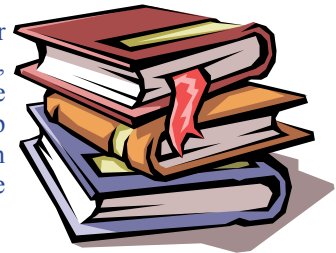
**AMERICAN LITERATURE 10** - 2 semesters. Prerequisite: Completion of American Literature 9. This second year English course is a comprehensive chronological study of American Literature. An outside reading program is required. Writing skills will emphasize the development of a theme from a single paragraph to various types of essays and reports. Students will also learn the essentials of composing a research paper. Students in American Literature II must receive a satisfactory grade on their research paper in order to successfully complete the course. Vocabulary studies are centered around PSAT skills.

## ENGLISH (continued)

**BRITISH LITERATURE** - 2 semesters. Levels: Honors, A or by placement. Prerequisite: Successful completion of American Literature. Third year English is a chronological study of British Literature. A comprehensive outside reading program is also required. Writing skills, the APA writing format and the development of thematic essays based on literary analysis will be emphasized. Students must receive a satisfactory grade on their research paper in order to successfully complete the course. Vocabulary studies are centered on SAT skills.

**WORLD LITERATURE** - 2 semesters. Levels: Honors, A, or by placement. Prerequisite: Successful completion of British Literature. Fourth year English will be devoted to the study of World Literature in all of its forms: poetry, mythology, plays, novels, short stories and essays. This course will focus on comparative cultures and their distinctive qualities. Critical thinking will be fostered through class discussion and essay writing. Required essays will develop the students' overall writing ability. The study of vocabulary will further enhance the students' preparation for the SAT and college placement tests. Students must receive a satisfactory grade on their research paper in order to successfully complete the course.

**ADVANCED PLACEMENT ENGLISH** - 2 semesters. Prerequisite: Teacher recommendation, "B+" average in British Literature, Advanced Placement pre-test, PSAT scores and a writing sample. This course is designed to prepare students for the Advanced Placement Examination. An intense reading and writing program will develop the students' abilities in both critical analysis and expository writing. Requirements: An extensive summer reading and writing program, monthly seminars to prepare for the mandatory Advanced Placement Exam. Testing Fee: approximately \$85.00.



**ANALYTICAL AND CREATIVE WRITING:** - 1 semester. Prerequisite: None. The course is designed to introduce students to the type of textual analysis expected at the college level. Emphasis will be placed on the improvement of writing skills through the use of selected readings designed to prompt both discussion and written analysis. Students will be encouraged to expand their creative writing ability through individualized instruction. Each student will produce a portfolio of selected writings.

**FILM ANALYSIS** - 1 semester. Prerequisite: None. This course is taught from a literary perspective. Students will analyze various components of film such as characterization, theme, and ideology against a backdrop of the literary movements of the time. Classroom discussion, written analysis, quizzes, tests and other types of authentic assessment will be implemented in determining student performance.

**JOURNALISTIC WRITING** - 1 semester. Prerequisite: None. This course is designed for students who are interested in journalistic writing. Students will have the opportunity to write and publish articles in the school's newspaper and literary magazine. Students will read, review and evaluate student and professional publications as they learn the basics of journalistic writing. In this hands-on class, students will work on all aspects of journalism including photography and layout.

**MEDIA ARTS PRODUCTION** - 1 semester. Prerequisite: None. This course develops and refines the skills necessary to produce a news-based TV show and promotional videos. These skills include interviewing, presentation, video-taping, editing, creating story boards, writing copy, public speaking, feature spotlighting and news reporting. Students must commit to time beyond regular school hours for taping.

**MYTHOLOGY** - 1 semester, Prerequisite: American Literature 9 & 10. This course will introduce students to the historical and religious background of Greek Mythology. Students will learn how the gods and goddesses are represented in history and other genres, namely Shakespeare and Disney. Through reading, lectures and film, students will gain an understanding of Greek Mythology and its cross curricular relevance.

**SAT WRITING AND CRITICAL READING** - Prerequisite: None. This course is designed to help improve student writing on the SAT's and to aid with the Critical Reading portion of the SAT's. Students will write and critique many different types of essays designed specifically for the SAT's.

## ENGLISH (continued)

**YEARBOOK** - 2 semesters. Prerequisite: None. In this course students will learn the process of creating a yearbook including page layout, copywriting and photography. Students will use the cutting edge graphic design program InDesign to create spreads for publication. Students will focus on creating pages for the current year's book as well as in planning and designing for the following year.

## MATHEMATICS

**FUNDAMENTALS OF ALGEBRAIC PROBLEM SOLVING** - Prerequisite: High School Placement Test. This course will prepare students for Algebra 1. Operations with whole numbers, integers and fractions are reinforced through application problems. In addition, students will review decimals and real numbers, percents, ratios and rates, proportions, and measurement.

**ALGEBRA 1** - 2 semesters. Prerequisite: High School Placement Test. This course is designed to introduce students to Algebra. Properties of real numbers; solving, graphing and writing linear equations and inequalities, introduction to exponents and square roots, introduction to polynomials and basic factoring rules and connections to Geometry involving the Pythagorean Theorem are some of the topics taught. Applications to real-life situations will be emphasized. Required material: TI84 Graphing Calculator.



**ADVANCED ALGEBRA 1** - 2 semesters. Prerequisite: High School Placement Test. This advanced course will include substantial work with skills and concepts relative to real-life situations. Topics will include basic algebraic concepts as well as exponential growth and decay functions, quadratic equations and inequalities, factoring rules, rational expressions and equations and radical expressions and equations. Required Material: TI84 Graphing Calculator.

**ALGEBRA 2** - 2 semesters. Prerequisite: Math Placement Test for the class of 2014 or successful completion of Algebra 1. This course includes traditional algebraic concepts as well as an introduction to more advanced concepts and applications to real-life situations. Topics will include systems of equations and inequalities, matrices, quadratics, polynomials, rational expressions and equations, radical expressions and equations and exponential growth and decay functions. Required material: TI84 Graphing Calculator.

**ALGEBRA 2B** - 2 semesters Prerequisite: Successful completion of Algebra 1B. This course will cover traditional algebraic topics focusing on graphing, linear functions, quadratic functions, exponential functions and logarithms. It will introduce complex numbers and relations. Required material: TI84 Graphing Calculator.

**ADVANCED ALGEBRA 2** - 2 semesters. Prerequisite: Math Placement Test for the class of 2014 or "B" in Advanced Algebra 1, or an "A" in Algebra 1 with departmental approval, or . This advanced course includes all topics covered in Algebra 2. In addition, students will study more advanced skills and concepts relative to real-life situations. Topics will include systems of equations and inequalities, matrices, quadratics, polynomials, rational expressions and equations, radical expressions and exponential growth and decay functions. Required Material: TI84 Graphing Calculator.

**GEOMETRY** - 2 semesters. Prerequisite: successful completion of Algebra 2. This course will focus on key topics which will provide a strong foundation in the essentials of geometry. Assignments will include opportunities to practice and maintain skills and concepts to real-life situations. Topics will include segments and angles, parallel and perpendicular lines, triangle relationships, congruency, similarity, quadrilaterals, polygons, circles, area and volume. Required material: TI84 Graphing Calculator.

**GEOMETRY B** - 2 semester. Prerequisite: Successful completion of Algebra 2 B. This course covers all the essential concepts of geometry. Required material: TI84 Graphing Calculator.

## **MATHEMATICS (continued)**

**ADVANCED GEOMETRY AND TRIGONOMETRY**- 2 semesters. Prerequisite: “B” average in Advanced Algebra 2 or Algebra 2/Trigonometry Honors or departmental approval. This advanced course is the prerequisite for Calculus. Assignments will include intense work with skills and concepts related to real-life applications. Topics will include concepts in Geometry as well as trigonometric ratios and functions, trigonometric graphs, identities and equations, laws of sines and cosines and areas of triangles and parametrics. Required material: TI84 graphing Calculator.

**MATH IN TODAY’S SOCIETY** - 2 semesters. Prerequisite: Successful completion of Algebra 1B, Algebra 2B and Geometry B. This course is divided in 2 semester topics. Semester one is focused on SAT preparation with special consideration give to “hints”, “shortcuts” and “tricks.” Semester two is focused on real-life applications such as budgets, taxes and special projects. Required material: TI84 Graphing Calculator.

**COLLEGE PREP. ALGEBRA** - 2 semesters. Prerequisite: Successful completion of Algebra 2. This course is designed to continue the concepts of Algebra 2 providing college-bound seniors with a solid algebra base and an introduction to trigonometry. Required material: TI84 Graphing Calculator.

**PRE-CALCULUS** - 2 semesters. Prerequisite: “B” average in Algebra 2 or “C+” average in Algebra 2/Trigonometry Honors. This course is designed as a preparatory course for calculus. It will encompass algebraic functions, trigonometric functions, exponential and logarithmic functions, analytic geometry, matrices and determinants. Required material: TI84 Graphing Calculator.

**ADVANCED CALCULUS** - 2 semesters. Prerequisite: “B” average in Algebra 2/Trigonometry Honors or “B” average in Pre-Calculus. This course is designed to encompass a brief review of algebraic functions, trigonometry, logarithms and limits. It also provides in-depth study of differentiation and applications and an introduction to integration as preparation for college level Calculus. Required material: TI84 Graphing Calculator.

**ADVANCED PLACEMENT CALCULUS** - 2 semesters. Prerequisite: “A” average in Pre-Calculus, or “B” average in Introduction to Calculus Honors. Teacher recommendation. This course is intended for students who have a thorough knowledge of college preparatory mathematics including algebra, axiomatic and analytic geometry and trigonometry. Advanced Placement Calculus is comparable to a first year college Calculus course. Requirements: Two or three evenings per month to prepare for the mandatory Advanced Placement Exam, Required material: TI84 Graphing Calculator. Testing fee: approximately \$85.00.

**PROBABILITY AND STATISTICS** - 2 semesters. Prerequisite: Successful completion of Geometry and Algebra 2. This course introduces students to the basic concepts of probability and statistics. This introductory course is designed to prepare students for study in the areas of education, psychology, or sociology, to name a few. Students are taught fundamental ideas that underlie decisions reached by statistical methods and the mechanics of problem solving.

**MATH SAT REVIEW** - Prerequisite: None. This course will review SAT style multiple choice and grid format math questions. These practical sessions will provide students with the confidence and skills necessary to be better prepared for the SAT.

## **PERFORMING ARTS**

**CHORUS** - 1 or 2 semesters. Prerequisite: None. This course is designed for students of all vocal abilities. A wide range of musical styles, from classical to rock, will be studied and performed. Basic vocal techniques, including posture, breathing, phrasing, intonation, and diction will be addressed. Required: Participation at liturgies and concerts.

**MUSIC APPRECIATION** - 1 semester. Prerequisite: None. This course exposes students to a survey of musical styles. Classical through contemporary compositions will be analyzed with special emphasis placed on the uniquely American musical forms of jazz and the Broadway musical.

## **PERFORMING ARTS (continued)**

**MUSICAL ENSEMBLE** - 1 semester. Prerequisite: Audition. This course is designed for students who own and can play one or more musical instruments, and who are interested in learning to play in ensembles. Guitar, bass, keyboard, drums and any woodwind or brass instrument can be accommodated. The emphasis will be on learning the elements of music theory and performances that are necessary for playing successfully in groups. Students will be exposed to a variety of musical styles. The different ensembles will be encouraged to perform at a variety of school functions.

**MUSICAL THEATRE WORKSHOP** - 1 semester. Prerequisite: None. This study and performance course is designed to give the singer/actor the skills and confidence necessary for auditions in musical theatre. Acting, singing, and movement techniques will be studied and applied to the various styles of musical theatre, culminating in a live performance.

**PLAY PRODUCTION** - 1 semester. Prerequisite: None. This course is designed to teach students the different aspects of producing a play, including directing, blocking, costuming, set design and construction. The class will produce one complete play which will be presented to the elementary school.

**PIANO LAB: BEGINNING PIANO** - 1 semester. Prerequisite: None. This course will provide students with an opportunity to develop music skills through piano performance, to develop good piano technique, to learn basic theory, sight reading, and to enjoy self-expression through piano playing. Utilizing the piano keyboards and computers, students will learn the basics of music notation, rhythm, melody and harmony. A recital will be held at the completion of the course.

**THE HISTORY OF ROCK MUSIC** - 1 semester. Prerequisite: None. This course will trace the development and significance of rock and roll. Students will study the chronological history of rock music beginning with such influences as blues, jazz, swing, country and western and rhythm and blues. Topics will include the musical and social trends of the 1960's, including the influence of the British Invasion, the rock explosion and social upheaval of the late 60's and the changes in rock and roll music during the 70's, 80's and 90's. The course will culminate in an exploration of today's current musical trends and icons.

## **PHYSICAL EDUCATION**

**PHYSICAL EDUCATION** Prerequisite: None. This course focuses on the student's participation in a well-rounded program of team and individual sports, physical fitness, conditioning, weight training, aerobics and recreational activities. The program is designed to develop life-long activities as a benefit to good health. Students will participate in the Presidential Physical Fitness Challenge.

**DANCE** - Prerequisite: None. Designed for students who have achieved basic levels of skill, technique, and knowledge in dance. Emphasis is placed on student choreography, performance and ongoing artistic growth.

**STRENGTH AND CONDITIONING** - Prerequisite: None. This course is designed for students who are athletes and are serious about enhancing sport specific performance. Students will be educated and instructed on proper techniques. The course will also involve teaching the importance of proper food intake, fueling muscles, and taking proper nutrients, vitamins, proteins, and carbohydrates.

**FAMILY LIVING 1** - Prerequisite: None. This health course helps students develop and maintain a positive self-image centered around respect for oneself and the diversity of others. Students are taught the importance of becoming responsible, mature young adults with sound values and decision-making skills.

**DRIVER THEORY** - Prerequisite: None. The student is instructed in safe driving techniques to insure safety on the road. Preparation for, and administration of, the written State Test is included.

**FAMILY LIVING 2** - Prerequisite: Successful completion of Family Living 1. The primary objective of this health course is to provide accurate scientific information to understand the dangers involved with substance abuse. It will provide information in such a way that it will influence students to take positive actions about their own health

**BASIC PRINCIPLES OF FIRST AID** - required, 1 quarter. Prerequisite: None. This course provides information and skills that help students administer first aid in emergency situations. CPR is an integral part of the instruction. American Red Cross certification for adult CPR will be issued to students who successfully complete course requirements

## SCIENCE

**ADVANCED BIOLOGY** - 2 semesters, six periods a week. Prerequisite: By placement. This comprehensive course includes in-depth coverage of both fundamental and current topics in biological science. Emphasis is placed on the laboratory experience which provides a kinesthetic format for understanding biological processes.

**BIOLOGY** - 2 semesters, six periods a week. Prerequisite: By placement. This course is designed to enable students to master the key concepts necessary in understanding key biological processes. Emphasis is placed on the laboratory experience which provides a kinesthetic format.

**BIOLOGY 2** - 2 semesters, six periods a week. Prerequisite: "C" average in Biology or Advanced Biology. This course provides a study of both plants and animals, their classifications, structure, functions, systems and behavior. Course work includes a study of the human body, diseases, and immunities. Laboratory work is an integral part of this course.

**ADVANCED CHEMISTRY** - 2 semesters, six periods a week. Prerequisite: "B" average in Biology Honors and a "B" average in honors mathematics and enrolled in honors mathematics. This course provides students with an intensive introduction to the basic concepts of Chemistry. Course work includes an in-depth study of dimensional analysis, significant figures, energy and matter, basic atomic theory, the periodic table, nomenclature, the mole, balancing equations, classifying chemical reactions, stoichiometry and gas laws. Laboratory work is an integral part of this course.

**CHEMISTRY** - 2 semesters, six periods a week. Prerequisite: Enrolled in Algebra 2. This course provides the students with an introduction to the basic concepts of Chemistry. Topics covered include metric conversions, significant figures, energy and matter, basic atomic theory, the periodic table, nomenclature, the mole, balancing equations, classifying chemical reactions, stoichiometry and gas laws. Laboratory work is an integral part of this course.

**PHYSICAL SCIENCE** - Prerequisite: None. This course incorporates the key topics covered in Physics, Chemistry, Earth Science and Astronomy. Both classroom and laboratory experiences illustrate fundamental chemical and physical principles.

**ADVANCED PHYSICS** - 2 semesters, six periods a week. Prerequisite: "B" average in honors level mathematics and Chemistry Honors. This laboratory course is designed as an introduction to basic physics topics with emphasis on understanding underlying concepts with some basic mathematical problem solving included. Course work includes in-depth study of dimensional analysis, basic units, scientific notation and application of the scientific method to problem solving.

**PHYSICS** - 2 semesters, six periods a week. Prerequisite: Successful completion of Algebra 2 and Chemistry. This laboratory course is designed as an introduction to basic physics topics with emphasis on understanding underlying concepts with some basic mathematical problem solving included.

**ENVIRONMENTAL STUDIES** - 2 semesters, six periods a week. Prerequisite: None. This course is designed to introduce students to major ecological concepts and the environmental problems that affect the world in which they live. The impact of human behavior on the environment is explored through various field activities.

**ADVANCED BIOLOGY 2** - 2 semesters, six periods a week. Prerequisite: "B" average in all honors science and mathematics classes. This advanced level course includes a comprehensive and in-depth investigation into the study of basic physiological functions, modern genetics, developmental biology and the bio-chemistry of living systems. A term paper and journal are components of this course.

**ADVANCED CHEMISTRY 2** - 2 semesters, six periods a week. Prerequisite: "B" average in all honors science and mathematics classes. This in-depth study of the major concepts of chemistry is designed for students who have shown previous superior performance in this discipline. Areas of study include acid/base and oxidation reduction reactions, thermodynamics, kinetics, electronic structure, periodic trends, chemical bonding, molecular geometry, organic chemistry and intermolecular forces.

**ADVANCED PSYCHOLOGY** - 1 semester. Prerequisite: "B" average in Introduction to Psychology. This advanced level course focuses on the specific topic of human development known as Developmental Psychology. Students will be required to conduct and present, both orally and through Power Point demonstrations, research designs based on recent psychological studies.

## **SOCIAL STUDIES**

**WESTERN CIVILIZATION** - 2 semesters. Prerequisite: By Placement. This advanced course investigates ancient Egypt, Greece and Rome, and continues through the European Middle Ages, to the emergence of modern Europe. Topics of significance include, the development of Greek Democracy, the spread of Christianity throughout the Roman world, the fall of the Roman Empire, the Dark Ages, Renaissance, and the religious division of Europe during the Reformation. Emphasis will be placed on developing writing and critical thinking skills.

**WORLD HISTORY** - 2 semesters. Prerequisite: By Placement. This course provides students with a broad view of the world outside the United States and the cultural connections to their lives. Students will examine the ancient world through the emerging nation-states of Europe and continue toward the post-modern world. Emphasis will be placed on the development of writing and critical thinking skills.

**U.S. HISTORY 1** - 2 semesters. Prerequisite: Completion of World History. This course covers American History from the Constitution to the Age of Industrialism. Special emphasis is placed on the Constitution and its effect on the daily lives of Americans. An awareness of current events is pursued

**U.S. HISTORY 2** - 2 semesters. Prerequisite: Successful completion of U.S. History 1. This course begins with the Ages of Imperialism and Progressivism and extends to the present. Current events and vital issues of the day are explored.

**ADVANCED U.S. HISTORY 2** - 2 semesters. Prerequisite: "B" average in U.S. History 1 Honors. This course begins with the Ages and Progressivism and extends to the present. Current events and the vital issues of the day will be explored. Prime source materials will be used and foreign policy examined. Historical analysis and interpretations will be used to examine select historical problems. Written and verbal skills will be developed.

**SOCIOLOGY** - 1 semester. Prerequisite: None. Sociology is the study of ordered, recurring patterns of social life. These patterns are studied in relation to their effect on group behavior. This course examines several of the key topics which include socialization, groups, marriage and family, social stratification, ethnic and racial groups, collective behavior, social change, and crime.

**THE AMERICAN EXPERIENCE THROUGH FILM** - 1 semester. Prerequisite: None. This course will cover the cultural aspects of American History as they are portrayed in film. By examining historical trends, events, and eras and their cinematographic interpretations, students will better understand the relationship between history and art. Students will analyze plot, discuss imagery, diagram characterization, and explore historical background through visual experience. This course will be discussion-oriented with an emphasis on written assignments.

**THE INFLUENCE OF SPORTS IN AMERICAN SOCIETY** - 1 semester. Prerequisite: None. This course will explore the unique relationship that exists between sports and American culture as well as the role sports plays in society. By examining these connections, students will better understand how competition drives America and how significant the role of sports and athletics is in the United States. Topics to be explored will include the concept of hero worship, the idea of personal responsibility in the athletic arena, and the business of professional athletics.

**ADVANCED U.S. HISTORY** - 2 semesters. Prerequisite: "B" average in Western Civilization or "A" average in World History. This course will include with the study of the Constitution and advance to the Age of Industrialism. Special emphasis will be placed on developing the skills necessary for the Advanced Placement U.S. History course. Historical analysis and interpretations of prime source materials will be presented through the year. Written and verbal skills will be emphasized.

**ADVANCED PLACEMENT U.S. HISTORY** - 2 semesters. Prerequisite: "B" average in Advanced U.S. History and teacher recommendation. This course is designed to give students both an in-depth appreciation of American History and to serve as preparation for the Advanced Placement Test. Numerous research projects comprise an important facet of this course. Requirements: Monthly seminars to prepare for the Advanced Placement Exam. Testing fee: approximately \$85.00.

**CONTEMPORARY ISSUES** - 1 semester. Prerequisite: None. This course is designed for students interested in everyday world events. It will provide a foundation for the evaluation and discussion of current events and issues. Discussion and presentations (oral and power point) will be an integral part of the course.

## **SOCIAL STUDIES (continued)**

**CRIMINAL JUSTICE AND THE LAW** - 1 semester. Prerequisite: None. Students will explore the inner workings of the law and the criminal justice system. Emphasis will be placed on the Constitutional basis for all American law, both civil and criminal, as well as the justice system and professions related to law enforcement. An extensive review of case law will be presented as it applies to various topics of the law.

**CULTURAL ANTHROPOLOGY** - 1 semester. Prerequisite: None. This course provides a humanistic approach to anthropology to enable students to understand human evolution from past civilizations to modern societies. It will serve to communicate an appreciation of various cultures, their origins, and their impact on the world.

**ECONOMICS** - 1 semester. Prerequisite: None. This course is designed to give students insight into the operations of our modern economic society. The economic achievements of our private enterprise system will be examined and the unsolved problems which it faces will be analyzed. Supply and demand, the banking system, and other topics will be discussed.

**EDUCATION** - 1 semester. Prerequisite: None. This course will provide students with basic instruction in the art of the teaching profession. Students will discuss various classroom techniques, curriculum models, philosophies of education and mechanics of teaching, including how children learn and lesson planning for optimal student success. The course will culminate with practice teaching of lessons and group critique.

**GENOCIDE AND HOLOCAUST STUDIES** - 1 semester. Prerequisite: None. This course provides an investigation of the origins, events, and outcomes of different genocidal events with emphasis on the Nazi Holocaust of the 20th century. Special emphasis will be placed on the Khmer Rouge, Idi Amin, Slobodan Milosevic and the Duvalier Regime. Research projects and interactions with the Holocaust Center at Brookdale Community College will serve to enhance each learner's understanding of these tragic events.

**PERSONAL FINANCE** - 1 semester. Prerequisite: None. This course introduces students to the responsibilities of personal finance. Emphasis will be placed on consumer education and understanding of the concepts of money management and responsible spending.

**PSYCHOLOGY** - 1 semester. Prerequisite: None. Psychology is the scientific study of the mental processes and behavior of organisms. This course examines several key topics in the field of psychology: memory and cognition, body and behavior, sensation and perception, motivation and emotion, stress and health, and altered states of consciousness.

## **WORLD LANGUAGE**

**INTRODUCTION TO FRENCH** – Prerequisite: Student decision. This supplementary course is designed for students who have previously had little or no instruction in French or may need reinforcement in certain skills. The course focuses on basic conversation and grammar. This course will enable students to gain further confidence in studying French during high school.

**FRENCH 1** - 2 semesters. Prerequisite: None. This introductory course consists of a multi-sensory approach to learning the French language. Insight into the French culture is included.

**ADVANCED FRENCH 2** – 2 semesters. Prerequisite: “B” average in French 1 Honors “A” average in French 1. This advanced course focuses on the major grammatical concepts of writing, reading, and speaking the French language. Students will increase their proficiency in both written and oral expression. Emphasis is placed on the students' comprehension of higher-level skills, especially that of synthesis, with regard to writing, reading, and speaking.

**FRENCH 2** - 2 semesters. Prerequisite: Successful completion of French 1. This second level course provides students with an understanding of the French language focusing on the constructs of grammar and conversation.

## **WORLD LANGUAGE (continued)**

**ADVANCED FRENCH 3 and 4** - 2 semesters. Prerequisite: "B" average in previous year's French course. The curriculum alternates between two different approaches allowing all students to increase their ability to understand and speak the French language. Vocabulary, grammar, and writing skills are increased as students study the literature, culture, history, and art of the French-speaking world.

**ADVANCED FRENCH 5** - 2 semesters. Prerequisite: "B" average in French 4 Honors. A continuation of French 4 Honors, this course further enhances the students' reading, writing, and speaking abilities. Literary works by authors such as Camus, Sartre, Hugo and St. Exupery are analyzed.

**INTRODUCTION TO SPANISH** - Prerequisite: Student decision. This supplementary course is designed for students who have previously had little or no instruction in Spanish or may need reinforcement in certain skills. The course focuses on basic conversation and grammar. This course will enable students to gain further confidence in studying Spanish during high school.

**SPANISH 1** - 2 semesters. Prerequisite: This introductory course consists of a multi-sensory approach to learning the Spanish language. Insight into the Spanish culture is included.

**ADVANCED SPANISH 2** - 2 semesters. Prerequisite: "B" in Spanish 1 Honors or "A" in Spanish 1 or results of placement test and achievement in grade 8 for the class of 2014. This honors course focuses on the major grammatical concepts of writing, reading, and speaking the Spanish language. Students will increase their proficiency in both written and oral expression. Emphasis is placed on the students' comprehension of higher-level skills, especially that of synthesis, in regard to writing, reading, and speaking.

**SPANISH 2** -2 semesters. Prerequisite: Successful completion of Spanish 1. This second level course provides students with an understanding of the Spanish language focusing on the constructs of grammar and conversation

**ADVANCED SPANISH 3** - 2 semesters. Prerequisite: "B" average in Spanish 2 Honors or "A" in Spanish 2. This honors course will increase the students' ability to understand and speak Spanish. The use of English is minimal. Vocabulary, grammar, and writing skills are increased and a greater appreciation of the Spanish life and culture is acquired.

**SPANISH 3** - 2 semesters. Prerequisite: "C" average in Spanish 2. Spanish 3 emphasizes a more intense study of grammar that encourages greater creativity in written and oral expression. Students are exposed to Spanish literature to further their comprehension of Hispanic culture and life.

**ADVANCED SPANISH 4** - 2 semesters. Prerequisite: "B" average in Advanced Spanish 3 Honors or "A" average in Spanish 3. In this multi-disciplinary approach to Spanish, students study the literature, history, art, and culture of Spain while further developing their listening, speaking, reading, and writing skills. Students are introduced to key events in Spanish history and to literary works from representative authors.

**SPANISH 4** - 2 semesters. Prerequisite: "C" in Spanish 3. The concentration of this course remains on conversation and culture. Grammatical concepts, as well as oral and listening skills, are further explored.