

Bishop Walsh School

Cumberland Maryland

Course Catalog

Edited September 1, 2022

High School Level

Course Numbers

000	Religion
100	English
200	Social Studies
300	Science
400	Foreign Language
500	Math
600	Computer Science/Business
700	Fine Arts
800	Music
900	Physical Education

INTRODUCTION

This publication is offered to acquaint students and parents at the middle and high levels with the academic offerings at Bishop Walsh School. Students and parents are urged to read the material carefully in order to make intelligent, realistic, informed decisions. Once the course selection sheet is completed and the parent's signature is affixed, the student's schedule will be completed and it will be difficult to make any changes. The privilege of selecting courses should not be taken lightly or for granted.

The philosophy of Bishop Walsh School includes decision-making by students as one of its goals. In turn, the student has a responsibility to live with the decision he/she makes. This process should not be a capricious one. Course selection must be made with a responsible amount of input from those qualified to assist. Each of the following persons plays an integral role in course selection:

The student must evaluate honestly personal abilities and potential, aptitudes and achievements, needs, and interests.

Parents should engage the student in a frank discussion on the previous considerations to reach a collective decision that will best serve the child's educational welfare.

Teachers, past and present, are good sources of advice since they have witnessed firsthand the scholastic performance of the student. Teachers of courses being considered know the academic demands of these courses and the level of performance expected of the student.

The Guidance Counselor is well-informed about the general college and career requirements necessary to attain specific goals.

THE PROGRAM OF STUDIES

An examination of this guide will reveal a variety of courses which, when studied in the approved sequence, will introduce the student to the foundations of Western Culture. This liberal arts program of studies best prepares the student to think critically, to grow both intellectually and spiritually, and to pursue particular interests.

The Middle School program centers on a traditional schedule and prepares the student for the High School program.

In high school, both the freshman and sophomore years are prescribed in order to provide a firm foundation in the sciences, the humanities, religion, and a variety of skill areas. Some degree of individualization of the academic program is made to accommodate differences in ability levels. The firm foundation that is built during the first two years of study at the high school level gives the student the basis for making choices about his/her academic program in the following years.

The student, with guidance from home and school, can elect a number of courses in addition to the required courses in the junior and senior years. This choice allows the student to pursue a program of studies that best addresses his/her abilities, interests, and future plans. The progression from a highly prescribed program of study to a program that allows for individual interests and natural curiosity gradually introduces the student to the need for planning, accurate self-assessment, and responsibility.

Withdrawal from a scheduled course is allowed only in rare cases. If a student withdraws from a course before the first three weeks, the course is not recorded on the permanent record. A later withdrawal may result in a failing grade in the course which will appear on the permanent record.

ACADEMIC REQUIREMENTS

All **Freshmen** are assigned

ONE EACH FROM

Religion
English
Mathematics
Science
Social Studies
Foreign Language

ONE ELECTIVE – Physical Education/Health is suggested

All **Sophomores** are assigned

ONE EACH FROM

Religion
English
Mathematics
Science
Social Studies
Foreign Language

ONE ELECTIVE – Fine Arts suggested

All **Juniors** are assigned

ONE EACH FROM

Religion
English
Foreign Language
Mathematics
Social Studies
Science

ONE ELECTIVE – Computers suggested

All **Seniors** must select courses that total six credits or seven classes.

ONE EACH FROM

Religion
English
Mathematics

FOUR FROM AMONG

Computers
English
Fine Arts
Foreign Language
Science
Social Studies
Physical Education

GRADUATION REQUIREMENTS

In accordance with the requirements established by the State of Maryland Department of Education and those determined by the Administration of Bishop Walsh School, a diploma is awarded to Bishop Walsh School students for the successful completion of the prescribed course of studies. To obtain a Bishop Walsh diploma, a student must acquire a minimum of 24 credits. Determination of a unit of credit is based on the satisfactory completion of course work and the number of hours of instruction established by the school administration. The following time requirement shall be used in determining a unit of credit: 1 credit is equal to 120 clock hours of instruction. ***Bishop Walsh does not allow for early graduation.*** We require four years of course work at the High School level.

Minimum requirements are as follows:

4.00	credits	Religion (one for each year in attendance at BW) Residency Requirement
4.00	credits	English Residency Requirement
3.00	credits	Social Studies (Civilizations of the World, American Government, US History)
4.00	credits	Mathematics (2 in Algebra, 1 Geometry, Pre-Calculus or Statistics)
5.00	credits	Mathematics (2 in Algebra, 1 Geometry, Pre-Calculus, Calculus or Statistics) – Student begins Math sequence in the 8 th grade.
3.00	credits	Lab-based Sciences (one of which must be biology)
2.00	credits	same Foreign Language – beginning with the class of 2014
1.00	credits	Technology Education
1.00	credits	Fine Arts
1.00	credits	Physical Education/Health
2.00	credits	Electives

ACADEMIC INFORMATION

The Program of Studies lists the courses that are offered. In high school, some of these are offered on an alternate pattern. Courses are listed by the academic department and each department has developed a variety of required and elective courses.

The Phase System

Phase 1 - Courses are designed for students who need an emphasis on the skills of the course.

Phase 2 - Courses are designed for students who need a moderate emphasis on the basic skills of the courses. These courses are college preparatory.

Phase 3 - Courses are designed for students whose command of the basic skills enables them to pursue a more detailed study of the course material. These courses are Honors level.

Phase 4 - These courses are Advanced Placement and taking of the national exam is mandatory.

Grade Point Average

The grade point average is calculated by dividing the total number of grade points earned by the number of courses attempted. The present grading system and the grade point assignment is:

Grading System		Grade Point Assignment
A+	100 - 98	4.0
A	97 - 93	4.0
B+	92 - 90	3.5
B	89 - 85	3.0
C+	84 - 80	2.5
C	79 - 75	2.0
D+	74 - 73	1.5
D	72 - 70	1.0
F	Below 70	0

Class Rank and Quality Points

Class rank is determined by assigning a “weighted” value to each course according to its phase. Greater “weight” is assigned to the higher phase levels. Class rank is determined by dividing the total weighted grades by the total number of courses taken.

Weighted Values

Grade	Phase 4	Phase 3	Phases 1 & 2
A+ 100 - 98	4.50	4.25	4.00
A 97 - 93	4.25	4.00	3.75
B+ 92 - 90	4.00	3.75	3.50
B 89 - 85	3.50	3.25	3.00
C+ 84 - 80	3.00	2.75	2.50
C 79 - 75	2.50	2.25	2.00
D+ 74 - 73	2.00	1.75	1.50
D 72 - 70	1.50	1.25	1.00

HONOR ROLL

The Honor Roll is determined by grade point average; the phase level of the course is not considered. The grade is meant to indicate whether or not the student is working to his or her ability level. Students may achieve

PRINCIPAL’S HONORS - the student’s quarter grades are all 93% or higher.

FIRST HONORS - the student’s Grade Point Average for the quarter is 3.5 and no grade is lower than 85%.

SECOND HONORS - the student’s Grade Point Average for the quarter is 3.0 and no grade lower than 80%.

General Information

All students, including juniors and seniors, are required to take courses that total a minimum of six credits or seven classes each year.

High School Level Courses in Science and Math taken in the Eighth Grade

Students who achieve a final grade of 93% or higher at the end of the seventh grade in mathematics and science and whose standardized test scores have been consistent with this rating may be advanced to the high school level in Algebra I and Science. This placement requires the approval of the parents and certain standards must be met in order to continue in these courses. The courses must be successfully completed in order to receive academic credit. This student will be required to complete five years of Math.

Advanced Placement Courses

The Advanced Placement Program has been developed by the College Board to provide high school students with a selection of college-level courses for which they may gain advanced placement or credit in college. These courses are special, college-level learning experiences that are offered over an academic year. They are challenging, stimulating, and compared to other high school courses, take more time, require more work, and provide a greater depth of study in the subject area.

Enrollment in these courses is highly selective and each department will carefully screen those students who wish to select an AP course. **Students who enroll in an AP course are required to take the AP examination which is administered in May of each year. No student should take more than 3 AP courses in a year.**

College Level Courses

Students who earn 21 or more credits by the end of the Junior year may be approved for a college-level course at Allegany College of Maryland or Frostburg State University on the following conditions:

The student's grades at Bishop Walsh have been consistent with their potential as reflected in standardized testing.

The timing of the courses(s) chosen does not interfere with courses that are required to be taken at Bishop Walsh.

The same or similar course is not already available at Bishop Walsh.

Course Cancellation

The administration reserves the right to cancel any course due to insufficient enrollment.

Course Change Policy

Students may revise their schedules free of charge during the period indicated by the Administration. After that time, there will be a \$50.00 change of course fee applied to any parent/student-initiated changes. This does not include the addition of a course that is recommended.

THE MIDDLE SCHOOL

The Middle School years are a time of rapid growth in young people. Educational, social, and athletic skills develop rapidly. In the religious realm, questions of faith and practice arise. The patterns that prove successful with elementary-aged children are no longer productive with the middle school student.

At Bishop Walsh, we try to provide a climate in which the developing middle school student will have the support of caring professionals, the limits of traditional schedule, homework expectations, and guidelines for proper behavior. With the opportunities provided in the sphere of academics and also student activities, students are enabled to test their evolving potential against a backdrop of solid educational programs. One of the greatest challenges to a child at this age is social development.

MIDDLE SCHOOL PROGRAM OF STUDIES

Religion

In all three years of the Middle School Religion program, a family life program is included to help students grow in a greater appreciation for family and friends as the center of love and trust in their lives. The program will help them to view their lives and all human life as a blessing from God.

062 Sixth Grade Religion

This course endeavors to highlight the major developments, themes, and personalities of the Hebrew Scriptures. To make the course as meaningful as possible to the students, an introduction to human growth and development is presented at the beginning of the course. The study of the people and lands of the Hebrew Scriptures follow this. The course concludes with a look at Israel today. Prayer services and special activities punctuate the course.

072 Seventh Grade Religion

The Christian Scriptures are studied in this course. Christ's life is used as an example to help students develop a positive self-image, integrity, and respect for others. Knowledge of basic Catholic doctrine is reinforced. An understanding of and appreciation for the Mass is provided.

082 Eighth Grade Religion

The history of the church is studied. This includes the development of Church doctrine and methods of worship and prayer. Throughout the course, an emphasis is placed on people who had strong influences on the Church growth from apostolic times to the present day. Also included in this program is a study of how to develop healthy relationships within the family, and with the community at large.

English

The English Program recognizes the emerging self-reliance of students giving them an opportunity to become skilled thinkers, good writers, and effective communicators.

162 172 182 English - Language Arts

The elements of composition and the fundamentals of grammar are covered in depth so that students develop understanding. The spelling component familiarizes the students with list words and their basic meaning. It endeavors to make every student a good speller with three different levels of activities in each lesson: Practice the words, Build Word Power, Reach Out for New Words. It also provides a meaningful application that integrates other Language Arts skills. In the literature segment of the program, the students read age-appropriate selections. The students are introduced to the basic elements of literature. The works of authors from around the world provide the students with examples of fiction, non-fiction, drama, and poetry. The course assists the students in making the transition from the traditional elementary reading series to a secondary literature program.

Social Studies

262 Sixth Grade Social Studies

The geography, history, and cultures of the world are explored beginning with the Western Hemisphere and ending with the Eastern Hemisphere.

272 Seventh Grade Social Studies

American History is studied through the first Americans and Exploration through the Mexican War and the 1850s.

282 Eighth Grade Social Studies

Surveying American History from Pre-Civil War through the 20th Century is the major emphasis of 8th Grade Social Studies. Along with a background in the historical, political, and social developments of the time, map skills and concepts of economics and sociology are further developed.

Science

Lab Fee Applies

362 Sixth Grade Science

The sixth-grade science program focuses on Earth/Space Science. Topics include outer space, the Milky Way galaxy, our solar system, earth's atmosphere, weather, climate, waters, rocks, and internal structures.

372 Seventh Grade Science

The seventh-grade program focuses on Life Science. Topics include plants, invertebrates, vertebrates, protists, human anatomy, genetics, evolutionary thought, the biosphere, and ecology. Lab Fee Applies

313 PreAP Physical Science

Phase 3

Year

1 credit

8th grade only

A hands-on approach to Physical Science and Chemistry. Students will be using equipment that will also be used in Chemistry. This course requires the application of knowledge gained from lab work and the text. Some mathematical and formula manipulation is required. Students learn to work cooperatively with lab partners. Students will be given direction and basic math skills development. Lab Fee Applies

Prerequisite: Departmental recommendation

382 Eighth Grade Physical Science

The eighth-grade program provides a general basis for future course work in science. Topics include general scientific process, introductory chemistry, introductory physics, introductory geology, introductory biology, and introductory ecology.

Foreign Language

464 Introduction to Spanish

In the sixth grade, each student is introduced to the study of Spanish for a trimester. During the seventh and eighth grades years, the student will study the Spanish language more in-depth.

474/484 Middle School Spanish

During the seventh and eighth grades, the students will concentrate on the Spanish language. Classes will meet on a semester basis and will concentrate on speaking and listening skills as well as the cultural aspects of the language. In preparation for high school language, middle school language is offered as a regular academic class. At the end of eighth grade, students will take a proficiency test to determine their placement (Phase II or III) in the high school language program.

Mathematics

562 Sixth Grade Mathematics

The sixth-grade course focuses on problem solving. The course will further assist the student in maintaining acquired skills dealing with whole numbers, decimals, and fractions. Estimation, approximation, and using mathematics to predict are included. Measurement and geometry are presented.

572 Seventh Grade Mathematics

The seventh-grade program extends the sixth-grade work. Percent and integers are introduced. Problem solving is stressed.

513 Algebra I

Phase 3

Year

1 credit

8th grade only

This course focuses on the study of elementary algebra with emphasis on all of the implications of the distributive law. Students will become familiarized with the use of variables and their use in polynomial and rational expressions. Students' learning will be on a more abstract level and will involve complex equations and graphing as well as the solution of inequalities. More stress is placed on problem solving techniques.

Prerequisite: Department recommendation

582 Eighth Grade Mathematics

In the eighth-grade program, skills development continues. Emphasis is placed on solving equations and inequalities.

Computer Education

662 Sixth Grade Computer

This is an introductory keyboarding course that teaches the student the touch-type method of typing. Emphasis is on technique and accuracy. Students will learn to type the alphabet, numbers, punctuation, and symbols using correct fingering and spacing. The formatting of letters, reports, tables, and other forms of correspondence are taught as well as a 10-key number pad unit.

576 Seventh Grade Computers

586 Eighth Grade Computers

In each grade students are introduced to and instructed in basic computer knowledge and the operation of word processing, spreadsheets, and presentation software. Eighth grade students will learn advanced features to solve problems and develop projects using word processing, spreadsheet, and presentation software. Students use the available software packages in the school's lab. Internet basics are also covered and explored.

Art

762 Sixth Grade Art

The program in the sixth-grade deals with symmetry, contours, design, composition, and pattern.

772 Seventh Grade Art

Seventh grade students study composition, color, drawing, and pattern.

782 Eighth Grade Art

The eighth-grade studies value, composition, drawing, and perspective.

Music

862 Instrumental Music Grade 6

872 Instrumental Music Grade 7

882 Instrumental Music Grade 8

The Instrumental Music program is designed for those who are interested in playing a musical instrument and participating in the band. Instructions are available and no previous instruction is necessary. Music classes meet during the regularly scheduled school day.

Physical Education

962 Sixth Grade Physical Education

972 Seventh Grade Physical Education

982 Eighth Grade Physical Education

Middle School students are taught the skills and rules for playing individual and team sports. Conditioning is done in each class. Among the team sports presented are soccer, basketball, volleyball, and softball.

HIGH SCHOOL PROGRAM OF STUDIES

Religion Department

Requirement: *One credit per year of attendance at Bishop Walsh*

012 Christian Becoming **Phase 2** **Year** **1 Credit** **Freshmen/Sophomores/Juniors**

This yearlong course will develop four major themes: Belief, Liturgy and Sacraments, Christian Morality, and Christian Prayer. It is a required course for all students. In the unit on Belief students will explore the Catholic doctrines presented in the Nicene Creed, and their significance in our daily lives. In the unit on Liturgy and Sacraments, students will develop an appreciation of why participation in the Liturgy and the Sacraments of the Church is so important in God's plan. The unit on Morality will include consideration of the principles of the Ten Commandments and the Beatitudes, along with adolescent development, values clarification, and Christian Values for person and society. Finally, in the unit on Christian Prayer, students will explore the variety of ways people develop a personal relationship with God.

022 Scripture **Phase 2** **Year** **1 Credit** **Freshmen/Sophomores/Juniors**

This is a course whose focus is the recorded Revelation of the Hebrew and Christian Scriptures. Literary, historical, form, and redaction criticism are considered to the extent that they can help to make the reading of the scriptures more meaningful for the students. Students are involved in discussions and prayers centered on the scripture and are expected to learn the explanatory material presented.

032 Morality **Phase 2** **Year** **½ Credit** **Freshmen/Sophomores/Juniors**

Ethical and moral issues of both a personal and societal nature will be covered in this course. The study will entail an investigation of the relationship between freedom and responsibility and law and conscience. Emphasis will be placed on the moral teaching of Jesus with the application of Christian moral principles to specific areas of life.

042 Prayer, Faith and Sacraments **Phase 2** **Sem** **½Credit** **Freshmen/Sophomores/Juniors**

This course seeks to examine from a faith perspective, how God reveals Himself through prayer and the sacraments. The course will explore various styles of prayer and forms of worship. Emphasis will be placed on the seven sacraments of Baptism, Confirmation, Eucharist, Reconciliation, Anointing of the Sick, Holy Orders, and Matrimony. The course is designed to enable the student to develop a rich prayer life and lead him/her to more meaningful worship in the community.

Note: This sequence begins with the 2019-2020 school year and will rotate on a three-year schedule. All freshmen, sophomores, and juniors will take Morality and Prayer, Faith, & Sacraments for the 2019-2020 school year. For the 2020-2021 school year, they will take Scripture. The year after that, they will take Christian Becoming.

052 Christian Lifestyles **Phase 2** **Sem** **½ Credit** **Seniors**

This course is designed to aid students in facing the challenges of young adulthood so that they can shape a future that is hopeful, healthy, and full. The belief that underlies this course is, quite properly, that a Christian Lifestyle is the optimal way to grow and to be fully alive.

062 Social Justice **Phase 2** **Sem** **½ Credit** **Seniors**

A timely study of the justice message of the Scriptures and the Catholic Church's tradition in social justice. The course will focus on current issues such as violence, poverty, hunger, racism, and peacemaking with some presentation of the latest church documents on these issues. The course is designed to challenge the students to examine their lives in light of the Gospel.

072 Student Assistant in Campus Ministry

242 Psychology **Phase 2** **Year** **1 Credit** **Jr/Sr**

This course is a study of the major concepts and theories in psychology. Students are given the opportunity to learn basic skills in psychological research, develop critical thinking skills, and apply psychological concepts to their own lives. Topics include the history of psychology, sensation and perception, memory, learning, and intelligence. This course covers additional topics in psychology including developmental psychology, personality, abnormal psychology, and social psychology.

254 Advanced Placement United States History **Phase 4** **Year** **1 Credit** **So/Jr/Sr**

*This course is offered in **odd-even** years.*

This is a survey course of United States History from colonial times through the modern era. There will be a systematic study of the diplomatic, economic, and social history of the United States. The student will do directed background reading and research. Papers and book reports will be required throughout the course. Oral and written examinations will be given.

Prerequisites:

- *an average of A or better in Social Studies courses (the majority of which must have been phase 3)*
- *Freshmen must have a grade of 95 in the current Social Studies class.*
- *at least a B average in any previous Social Studies A.P. course*
- *approval by Social Studies Department Chair and previous Social Studies teachers*

Requirements for successful completion:

1. *The student must take the course for the entire year.*
2. *The student must take the United States History Advanced Placement examination in the Spring.*

264 Advanced Placement Political Science/American Government **Phase 4** **Year** **1 Credit** **So/Jr/Sr**

*This course is offered in **even-odd** years*

This course involves both the study of general concepts used to interpret United States politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. The specific topics addressed include: Constitutional background, political beliefs and behaviors, political parties and interest groups, and civil rights and liberties.

Prerequisites:

- *an average of A or better in Social Studies courses (the majority of which must have been phase 3)*
- *Freshmen must have a grade of 95 in the current Social Studies class.*
- *at least a B average in any previous Social Studies A.P. course*
- *approval by Social Studies Department Chair and previous Social Studies teachers*

Requirements for Successful Completion:

1. *The student must take the course for the entire year.*
2. *The student must take the Advanced Placement Political Science/American Government exam in the Spring.*

284 Advanced Placement Psychology **Phase 4** **1 credit** **Jr/Sr**

The course is designed to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Prerequisites:

- *An average of A in phase 3 social studies courses or biology or a B average in AP Biology*
- *At least a B average in any AP Social Studies course*
- *Approval by the social studies department chair and previous social studies teacher*

Requirements for Successful Completion:

1. *The student must take the course for the entire year.*
2. *The student must take the Advanced Placement Psychology exam in the Spring.*

274 Sociology 101 - Introduction to Sociology **phase 4** **3 college credits** **Sem** **Jr/Sr**

Dual enrollment course at ACM, see the end of catalog for description

Science Department

Requirements: *A minimum of three credits in lab-based courses, one of which is Biology.*

302 College Prep Earth Science **Phase 2** **Year** **1 Credit** **Fr/So/Jr/Sr**

- a minimum grade of A in honors biology
- Approval by the science department chair and previous science teacher

Requirements for successful completion:

1. The student must take the course for the entire year.
2. The student must take the Biology Advanced Placement examination in the Spring.

374 AP Environmental Science Phase 4 1 credit Jr/Sr

A college Environmental Science course presenting a broad study of major college departments including geology, biology, environmental studies, environmental science, chemistry, and geography. The AP Environmental science class includes the following topics: Earth Processes, population, land and water use, energy resources, pollution, and global change. This class includes a lab component.

Prerequisites:

- 93 or higher in Honors Biology and Honors Chemistry
- Approval of science department chair and previous science teacher

Requirements for successful completion:

1. The student must take the course for the entire year.
2. The student must take the Environmental Science Advanced Placement examination in the Spring.

Foreign Language Department

Requirements: 2 credits in the same modern foreign language.

462/463 College Prep/Honors Spanish I Phase 2/3 Year 1 Credit Freshmen

This course is both communication-based and grammar-based in its approach. All four skills are stressed in classroom instruction: listening, speaking, reading, and writing. The language is taught in the cultural context of both Spain and Latin America. Video and computer software that complement curricular topics are used as part of the coursework.

472/473 College Prep/Honors Spanish II Phase 2/3 Year 1 Credit Sophomores

Building on the foundation of structure and vocabulary mastered in the first year of study, the course provides additional opportunity toward proficiency in Spanish. Further study of structure and culture is included as well as the consistent practice of previously mastered material. Specific emphasis is placed on the skill of reading in Spanish. Students will use video excerpts and computer software that complement curricular topics.

Prerequisite: Successful completion of Spanish I

482/483 College Prep/Honors Spanish III Phase 2/3 Year 1 Credit Jr/Sr

This course strengthens basic listening, speaking, reading, and writing skills in Spanish. Additional emphasis is placed on reading and listening skills. A focus is made on speaking exercises and conversation through a variety of mediums and will enable students to participate actively in the communication process.

Prerequisites: Teacher recommendation; successful completion of Spanish II; Student contract to speak Spanish in class.

493 Honors Spanish IV Phase 3 Year 1 Credit Jr/Sr

In this course, the development of understanding, speaking, reading, and writing in Spanish is continued. Listening and speaking skills are stressed along with the importance of correct pronunciation. The reading and writing exercises treat of the Hispanic way of life, the attitudes and customs of Hispanic peoples, and the history of their civilizations. Short readings from Hispanic literature, feature films, and film excerpts are included. Computer software and online research will be used to personalize and deepen language skills. Special attention will be given to the transition to college-level language study.

Prerequisites: Teacher recommendation; successful completion of Spanish III; student contract to speak Spanish in class.

Mathematics Department

*Requirements: A minimum of 4 credits: 2 in Algebra, 1 in Geometry, 1 in Pre-Calculus or Statistics
8th Grade Students who complete Algebra I need a minimum of 5 credits. 2 in Algebra, 1 in Geometry, Pre-Calculus, and Calculus or Statistics.*

511 Foundational Algebra I Phase 1 Year 1 credit Freshmen

This course is similar in content to Course 512. Problem solving and repetition play a major part in this course. Emphasis is placed on the practical use of algebra.

512 College Prep Algebra I	Phase 2	Year	1 credit	Freshmen
This course focuses on the study of elementary algebra with emphasis on all of the implications of the distributive law. Students will become familiarized with the use of variables and their use in polynomial and rational expressions. Students learn simple graphs and equation solving. Problem solving techniques permeate the entire program.				
513 Honors Algebra I	Phase 3	Year	1 credit	Freshmen
This course is similar to Course 512 in content but on a more abstract level. Also, it goes further into the more complex equations and graphing as well as the solution of inequalities. More stress is placed on problem solving techniques. <i>Prerequisite: Department recommendation</i>				
521 Foundational Geometry	Phase 1	Year	1 Credit	So/Jr/Sr
This course deals with Geometry from the applied point of view. It deals mostly with practical uses such as areas, volumes, and the like. It will consider calculations both by hand and with computational devices as applied to different figures and solids. It will tend to emphasize more of the hands-on approach than the theoretical one.				
522 College Prep Geometry	Phase 2	Year	1 Credit	So/Jr
This course introduces students to the power of reasoning and logic through the study of basic Euclidean geometry. Students are exposed to both the traditional geometrical thinking which has long been a part of our culture as well as the applications which are a part of our contemporary lives with tie-ins such as Cartesian coordinates and computer graphics. Topics vary from the theoretical in proving theorems to the practical of constructions and the calculation of areas and volumes. <i>Prerequisite: Algebra I</i>				
523 Honors Geometry	Phase 3	Year	1 Credit	So/Jr
This course is a more advanced version of Course 522. It consists of studying each of the topics from the point of view of proof, construction, and practical problems. More geometric figures are analyzed in detail. Problems deal with both the abstract and concrete applications. <i>Prerequisites: Algebra I and Department recommendation.</i>				
531 Foundational Algebra II	Phase 1	Year	1 credit	Sophomores, Juniors
This course continues the Algebra I program. Quadratics, other polynomials, rational functions and graphing are topics covered in this course. Emphasis is placed on Factoring and problem solving.				
532 College Prep Algebra II	Phase 2	Year	1 Credit	So/Jr
This course extends the items studied in Course 512 to higher degree equations. Quadratics, other polynomials, rational functions, the use of exponents, and graphs are stressed. Techniques of factoring and solving with computational devices are studied and compared. <i>Prerequisite: Algebra I</i>				
533 Honors Algebra II	Phase 3	Year	1 Credit	So/Jr
After a review of basic algebra, this course moves to study open sentences in one and two variables as well as their graphs. Besides polynomials and rational functions, these same techniques are applied to other functions as well as to the complex plane. Students will be expected to learn both traditional and electronic methods of solving and graphing equations and a heavy emphasis is placed on problem solving. <i>Prerequisite: Algebra I</i>				
542 Consumer Finance	Phase 2	Year	1 Credit	Sr
Consumer Finance is a full-year elective designed for students who are interested in a course designed to develop and reinforce the applications of mathematics in today's society. Students will investigate topics such as earning money, buying food, shopping, managing a household, buying and maintaining a car, traveling, budgeting, banking and investing, paying taxes, and preparing for careers. The goal of this course is to guide students in building a strong foundation in logical thinking and problem solving that will enable them to make good decisions in their daily lives.				
553 Honors Statistics	Phase 3	Year	1 Credit	Jr/Sr
This is an introductory course in statistics. Semester 1 involves a detailed study of the following: collection, organization, and graphical representation of data, data description using measures of central tendency (mean, median, mode), probability and counting rules, and confidence intervals. Semester 2 involves a more in-depth analysis of data, centered on hypothesis testing. Analysis will be done on mean, proportion, variance, and standard deviation for single samples and two samples (both independent and dependent), correlation and regression analysis, and chi-square tests for goodness-of-fit, normality, independence, and homogeneity. <i>Prerequisite: Algebra II (phase 3) or Pre-calculus</i>				

554 Advanced Placement Statistics Phase 4 Year 1 Credit Jr/Sr

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: exploring data, sampling and experimentation, anticipating patterns, and statistical inference.

Prerequisites:

- An A average in all Math classes
- Approval of the math department chair and previous math teacher

Requirements for successful completion:

- The student must take the course for the entire year.
- The student must take the Statistics Advanced Placement examination in the Spring.

563 Honors PreCalculus Phase 3 Year 1 Credit Jr/Sr

This course includes the structure of the real number system and various functions having the real numbers as their domain. Trigonometric, logarithmic and exponential functions are stressed as well as linear programming, continuity, and the binomial theorem. The class focuses on the uses of these in problem solving and graphical analysis.

Prerequisite: Algebra II, phase 3 minimum grade of B.

573 Calculus Phase 3 Year 1 Credit Senior

This course includes coverage of both differential and integral calculus. Emphasis is on the applied rather than the theoretical. Graphing calculators are utilized as appropriate.

584 Advanced Placement Calculus Phase 4 Year 1 Credit Senior

This course covers the syllabus published by the College Board and includes the study of limits, derivatives, and integrals of rational and transcendental functions. The course is split evenly between theory and applications. The class conforms to the requirements of the ETS exam in using the graphing calculator as an integral part of the class. Class is a double period one day a week.

Prerequisites:

- pre-calculus
- An A average in all other Math classes
- Approval of the math department chair and previous math teacher

Requirements for successful completion:

1. The student must take the course for the entire year.
2. The student must take the Calculus Advanced Placement examination in the Spring.

564 Mathematics 102 - College Algebra phase 4 3 college credits Sem Jr/Sr

Dual enrollment course at ACM, see description at end of the catalog

Computer Science

Requirement: 1 credit in a technology course

602 Computer Applications Phase 2 Sem ½ Credit Fr/So/Jr/Sr

The goal of the course is to provide the student with skills, support, and practice necessary to become computer literate. The specific skills and competencies required to master programs in Microsoft Office 2010. Word, Excel, PowerPoint, Publisher, and Access will be covered throughout the semester.

673 Digital Design Phase 3 Sem ½ credit Fr/So/Jr/Sr

This course will provide students with the opportunity to use state-of-the-art technology to create digital graphics for in-house publications and to design professional websites. Students will use Photoshop for digital designing and Dreamweaver for web designing.

664 Computer Technology 101 – Computer Literacy phase 4 3 college credits Sem Jr/Sr

Dual enrollment course through ACM, see description at end of the catalog

Fine Arts Department

Art

Requirement: 1 credit in Fine Arts

752 Art and Design 1 Phase 2 Year 1 credit
This course introduces art history, art criticism, aesthetic judgement and studio production. Emphasis is placed on the ability to understand and use elements and principles of art through a variety of media, processes and visual resources. Master artworks will also be studied for historical and cultural significance. This course is the prerequisite for all other art classes. Art fee applies.

762 Art and Design 2 Phase 2 Year 1 credit
Students explore media and techniques used to create a variety of 2-D artworks in drawing, painting, printmaking, and collage. Students practice, sketch, and manipulate the structural elements of art. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials. Art fee applies.

722 3D Design Phase 2 Year 1 credit
This course is designed to provide students with the opportunity to explore methods of artistic expression through studies in pottery and three-dimensional art making. Study will include a concentration in pottery work with experiences on the pottery wheel, hand-built ceramic work, and glazing. There will also be creation of sculptures while exploring a variety of media including clay, plaster, metal, wood, and plastic. Art fee applies.

7702 Photography Phase 2 Year 1 credit
Introduction to Photography will focus on the basics and throughout class we will work on building confidence in taking and presenting photographs. You will learn how to improve your creative vision by being conscious about scene elements like light, color, composition and texture and identifying how you can use them to improve your skills. Art fee applies.

Music

Requirement: 1 credit in Fine Arts

812 Instrumental Music/Band I (Homeroom) Phase 2 Year ½ Credit Fr/So/Jr/Sr
This course is designed to institute discipline and awareness in the area of instrumental music and to develop the musical talents of those enrolled. The students learn the basics of playing their particular instruments and the playing of those instruments in the ensemble. The course strives to create an atmosphere of good musicianship, high standards of performance, and provides a wide range of performance situations for the students. Students enrolled in this course must participate in a performing ensemble.

822 Exploratory Music Phase 2 Year 1 Credit Fr/So/Jr/Sr
Exploratory Music is a course designed to introduce high school students to music by building on the elementary and middle school curricula. This course will include, but is not limited to, the reading, writing, and history of music from its inception to current times. Exploratory music may include elements of performing and composing music in a variety of instrumental and technological media.

Physical Education Department

Requirements: 1 credit in Physical Education/ Health

902 Health I Phase 2 Sem ½ Credit Fr/So/Jr/Sr
Study units will include mental, social, environment, and community-related health as well as human development, nutrition and fitness, substance abuse, prevention of disease, and first aid.

912 Physical Education/Health I Phase 2 Year 1 Credit Fr/So/Jr/Sr
This required course attempts to involve students in an organized and structured system of physical and mental exercises for both individual, dual, and team sports. A variety of activities include competitive and team sports as well as physical fitness and conditioning, weight training, game activities, etc. In the Health segment of the course, study units will include mental, social, environment, and community-related health as well as human development, nutrition and fitness, substance abuse, prevention of disease, and first aid.

