

Merion Mercy Academy



Course of Studies Guide

2018 - 2019

511 Montgomery Avenue
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www.merion-mercy.com

January 2018

Dear Parent(s),

The Program of Studies describes the course offerings for the 2018 - 2019 school year. The students will be oriented to the registration process during homeroom. I encourage your daughter to consult her teachers, the department chairperson, her guidance counselor, and/or the college counselors concerning her course selections. I will also be available to help her. I recommend that you read the descriptions carefully as you can be most helpful in guiding realistic choices on her part.

Certain courses are required at each grade level; those courses will be automatically scheduled. Your daughter may choose electives if she is eligible for them. The normal class load is **six** credits. Students achieve 0.5 credit for successful completion of semester-long courses and 1.0 credit for successful completion of year-long courses. A student must receive my permission to register for more than six credits unless she is currently carrying at least a 3.3 GPA. I will grant permission for this after considering the student's ability and scheduling possibilities. **You and your daughter should give serious consideration to the time commitment that is attached to each additional course.**

The school reserves the right to cancel courses for which there is insufficient enrollment. No student is guaranteed her additional elective(s) beyond 6 credits.

Your daughter's present teachers will approve her choices in their disciplines. She may need to meet with the department chair if she is electing to move into a new field of study or level. **She must also meet with her personal counselor, college counselor, or me to discuss her proposed schedule.** Once her course selection has been completed, I ask you to look over the sheet and give final approval. The form is to be returned to your daughter's homeroom moderator no later than **Wednesday, February 21**. A **late fee of \$30** will be assessed to students whose completed forms, with all necessary signatures, are not in by February 21. Courses will not be scheduled for students whose forms are incomplete or who have not paid the late fee, if it applies.

Once a course selection sheet is submitted with parental approval, no change in courses will be made except for a serious reason. A course change form signed by a parent and the student and a \$30.00 fee will be required for a course change request. If changes need to be made due to scheduling conflicts, I will notify your daughter and discuss available options with her.

Thank you for your interest in this process. Let us continue to work together so that your daughter will benefit from the education available to her at Merion Mercy Academy.

Sincerely,

Mary Ann Danovich
Assistant Head of School for Academic Affairs

GRADUATION REQUIREMENTS

Merion Mercy Academy is a college preparatory school. In grades 9 through 12, subjects are assigned to students in accordance with Pennsylvania state requirements and Merion Mercy Academy philosophy. While students are required to complete at least 24 credits (at least 6 credits each academic year), additional credits may be earned according to student needs and future plans. Students are required to take four credits of theology and English; at least three credits of social studies, mathematics, and science; at least two credits of a foreign language; one credit of health/physical education; one half credit of writing in tenth grade; and at least three and one-half elective credits.

COURSE LEVELS

Courses are offered on 3 levels:

Level AP[®]: Advanced Placement[®] courses for which college credit may be received. Students are required to take the AP[®] exam at the end of the course. The AP[®] exam fee (\$95 per exam) will be added to the tuition bill.

Level A: Advanced courses. Qualifying grades and department approval are prerequisites for all of these courses.

Level CP: All other courses are standard college preparatory courses.

ONLINE COURSES

AP[®] courses not offered at MMA, Mandarin Chinese, Arabic, and other courses are offered online through Apex Learning, the Montgomery County Intermediate Unit, Mercy Learning Online, and other virtual high school sites. Costs vary but are approximately \$375 per semester.

Students who choose to enroll in an online course must have Internet access at home as well as access to their e-mail account. Access at school will be provided but due to the nature of the courses, access at home must also be available. Students need the following skills to be successful in an online course: ability to organize, study, and learn in an independent environment; ability to work with others; effective written communication skills; technical capacity; critical thinking; desire to learn in a new medium; demonstration of patience; and commitment to learning. Students should have at least a 3.0 GPA if they desire to take an online course.

Students who are considering enrolling in an online course must receive permission from the Assistant Head of School for Academic Affairs in addition to any departmental approvals.

Theology Department

All students are scheduled for theology each year. This course of study offers a comprehensive background in the basic beliefs and teachings of the Catholic faith. The following courses are required:

The Hebrew Scriptures

Required in Grade 9

Course Number 012

First Semester

The Hebrew Scriptures contain the roots not only of Judaism but also of Christianity. In this course students are introduced to the various types of literature contained within scripture. The focus is on the four main types: law, history, wisdom, and prophets. The course approaches scripture on both an academic and a spiritual level stressing its value as great history, great literature, and as a guide for the soul. The notion of call, introduced through the study of Abraham, is extended to foster an understanding of, and a response to, each student's individual call as well as to her communal call to mercy in the spirit of Catherine McAuley. This course also demonstrates the power of scripture as the living word of God in and for our lives today.

Freshmen are given a general overview of the basic beliefs, prayers, customs, teachings, laws, and rituals of the Roman Catholic faith. This overview continues throughout the four-year program.

The Christian Scriptures

Required in Grade 9

Course Number 014

Second Semester

This course focuses on Jesus as the fulfillment of God's promise and plan for salvation. Through this course it is hoped that the students develop a personal relationship with Jesus rather than just learn facts about him. The historical Jesus is presented as a basis for meeting Jesus on a deeper level in their own lives, both in the Church and in the world today. There is a focus on using the Gospels, especially the miracles and parables, as sources of personal prayer and as guides for doing works of mercy in daily life.

Church History

Required in Grade 10

Course Number 022

First Semester

This is a survey of the history of the Church from the Resurrection to Vatican II. Special emphasis is placed on units covering the following topics: the Early Christian Communities, the Middle Ages, the Reformation, the Missionary Church, and Vatican II and the Contemporary Church. The difficulties, mistakes, and human failings of the Church are presented along with its glory. The students are introduced to a number of people who through our history serve as examples of faith-filled believers, compassionate servers, serious *prayers* and true Christian leaders. Students are encouraged to look at the Church's past realistically and with love so that they, as members, might not repeat its mistakes but rather support and carry on its divine mission.

Sacraments

Required in Grade 10

Course Number 024

Second Semester

This course presents the sacraments in such a way that the students' knowledge of and experience with the sacraments is broadened and integrated into their daily lives. The sacraments are presented as "God's Body Language" – God's way of communicating His love and mercy to us and of calling us to communicate love and mercy to others. The history of each sacrament is presented with an emphasis on the human experiences that are celebrated in each one. Great emphasis is put on the importance of understanding the power of symbol and ritual, both in our everyday life and in our sacramental life. A unit of this course is devoted to the study of the rites and rituals of other major world religions, specifically Islam, Hinduism, Buddhism, and Judaism.

Morality

Required in Grade 11

Course Number 032

First Semester

This is a foundation course in morality that is presented in the light of Christian faith and Church teaching. The course provides a background in conscience formation and in the process of Christian moral decision-making. Specific moral issues are discussed from the standpoint of Scripture and Church documents. The students are encouraged to become both knowledgeable about and responsive to these issues.

Social Justice

Required in Grade 11

Course Number 034

Second Semester

This course introduces for discussion the major social justice issues of the day (e.g. poverty, hunger, materialism, sexism, racism, war, violence, etc.). The Christian call to respond to these issues is presented in the light of scripture and Church teachings. The students are involved in researching the issues and are encouraged to develop attitudes and actions which will help to bring mercy and justice to those confronted by those issues.

Christian Spirituality

Required in Grade 12

Course Number 042

First Semester

This course begins with an invitation to seniors to identify and reflect on their own personal spirituality and the common elements their spirituality may share because they are followers of Christ. Spirituality is where faith and life meet. Therefore, taking a look at the very real relationships in their lives and how they connect in those relationships will provide an opportunity to deepen their faith as they transition into a new phase of their lives. The course covers the Christian meaning and spirituality of the four basic life choices: single, married, religious, and ordained. The course continues to examine spirituality in a variety of theological areas of interest chosen by the students and teacher in each class.

Contemporary Christian Women

Required in Grade 12

Course Number 044

Second Semester

This course is designed to deepen the student's awareness of women whose lives embody the qualities of spirituality, faithfulness, mercy, service, leadership, and courage, which have been stressed throughout the four-year theology program. A particular emphasis is given to Catherine McAuley, the foundress of the Sisters of Mercy. The course also focuses on great women of scripture, traditional female saints of the Catholic Church, and significant women of faith of the twentieth century. Students are encouraged to recognize the stories of these women as part of their own story. They are also guided, through readings and discussions, to interpret issues raised by these women in the light of their own time and culture. The course culminates with a personal mission statement that captures their intention to live the qualities of these women in their own lives.

English Department

The English Department offers a broad range of courses. “A”-level classes are open to qualified students. Freshmen are placed based upon their standardized test scores, HSPT results, placement test, and 7th and 8th grade marks. Thereafter, students are placed by the department. Students are required to take Literature and Writing, American Literature, British Literature, Effective Writing, and two semesters of courses selected from those numbered from 140 to 150.

Literature and Writing

Offered to Grade 9

Course Number 112

Year

This course focuses on both the study of literary genres and the writing process. Through exploration of the short story, essay, autobiography, poetry, novel, and drama, students develop analytical thinking, writing, and critical reading skills. Major works could include *The House on Mango Street*, *Romeo and Juliet*, and *Between Shades of Gray*. By using the *Vocabulary Workshop* Interactive Edition and studying words drawn from their texts, students also expand their vocabularies.

Literature and Writing A

Offered to Grade 9

Course Number 115

Year

This course focuses on both the study of literary genres and the writing process. Through exploration of the short story, essay, autobiography, poetry, novel, and drama, the student develops her analytical thinking, writing, and critical reading skills. Major works could include *Jane Eyre*, *The Book Thief*, *The Glass Menagerie*, *A Midsummer Night's Dream*, and *Romeo and Juliet*. Students are encouraged to develop their vocabulary through the study of words drawn from their texts and those included in the *Vocabulary Workshop* Interactive Edition. Oral expression is also an integral component of the course.

American Literature

Offered to Grade 10

Course Number 122

Year

This course presents the development of ideas in American literature. Selections include such authors as Hawthorne, Poe, Emerson, Thoreau, Dickinson, Whitman, Fitzgerald, Steinbeck, Miller, and Salinger. With reference to the historical background, the course enables the student to analyze significant literary works as seen within the framework of American ideology. Critical reading and writing and vocabulary development are incorporated into the course through the *Vocabulary Workshop* Interactive Edition and supplemental materials.

American Literature A

Offered to Grade 10

Course Number 125

Year

This intensive course follows the development of ideas in American literature from the colonial period to modern times. Students become familiar with authors such as Bryant, Thoreau, Fitzgerald, Wharton, and Wilder as they read selected novels and/or plays and works included in the anthology. Through frequent essay assignments based on both regular and outside readings, students are encouraged to strive for deeper analysis and improved logic, clarity, and maturity in both written and oral expression. Critical reading and writing and vocabulary development are incorporated into the course through the *Vocabulary Workshop* Interactive Edition and supplemental materials.

British Literature
Offered to Grade 11

Course Number 132
Year

This survey course covers material from the Anglo-Saxon period to the late twentieth century. The primary objectives of this course are for students to develop their critical thinking and writing skills while developing an appreciation for British literature. Students examine how authors use language, analyze literary themes, and become familiar with the historical contexts of various literary movements. Novels/plays will cover the English Renaissance, Victorian Period, and Modernism. Critical reading and writing and vocabulary development are incorporated into the course through the *Vocabulary Workshop* Interactive Edition and supplemental materials.

British Literature A
Offered to Grade 11

Course Number 135
Year

This course examines significant works of British literature within a historical context. The course begins with an extensive analysis of the novels and plays assigned over the summer. Works from the Anglo-Saxon period, the Middle Ages, Renaissance, and the Seventeenth Century comprise the first semester. Second semester continues the study of literature up to the twentieth century. Skills in critical thinking, analytical writing, and oral participation are stressed. Critical reading and writing and vocabulary development are incorporated into the course through the *Vocabulary Workshop* Interactive Edition and supplemental materials.

The following courses will be offered on a rotating basis. The school retains the right to cancel courses that have insufficient enrollment. One of these courses is open to sophomores and juniors. Seniors, regardless of electives taken in previous years, must take at least one literature-based (as indicated by an *) semester course. Seniors who have not previously taken additional electives must take two semester courses, and may take additional courses if they so choose.

Contemporary Literature*
Offered to Grade 12

Course Number 141, A Level
Course Number 142, CP Level
One Semester

This course acquaints students with some of the most esteemed living authors and significant works from the mid-twentieth century to the present. The authors covered represent different cultures and have all received major literary awards, such as the Nobel Prize, Pulitzer Prize, Booker Prize, or National Book Award. In addition to reading and analyzing poetry, short stories, and novels, students will read and respond to non-fiction articles and essays related to topics presented in the literature. Throughout the course, students will consider the following questions: How is literature universal? What does literature tell us about the human condition? How does culture affect literature? What makes a book a “classic” or a work worthy of awards?

Gothic Literature*
Offered to Grade 12

Course Number 144
One Semester

Are you afraid of the dark? Are you frightened by things that go bump in the night? Do you love to hide under a blanket and peek out at the frightening images onscreen? Throughout the centuries, authors have been the creators of such frightening monsters as Frankenstein, Dracula, and even Aro. This course seeks to investigate the origins of such monsters; delve into the world of the strange and phenomenal; and examine the role of Gothic literature in popular culture and the literary world. Texts will include *Wuthering Heights* and a variety of short stories, both classic and contemporary.

Jane Austen's World* A Course Number 145

Offered to Grade 12

One Semester

This course offers an overview of Jane Austen's life and literary works. Austen fashioned some of the most enduring female protagonists in history, including Elizabeth Bennett, Fanny Price, and Marianne Dashwood. In an attempt to understand and appreciate these women according to their cultural context, this course pairs a close reading of several novels (which may include *Sense and Sensibility*, *Northanger Abbey*, and *Mansfield Park*) with historical research and literary criticism. We will examine the unconventional life of Jane Austen, attitudes towards women in the Regency period, the role of the "novel of manners," and the "marriage plot." Students may be required to meet outside of class to view film adaptations and participate in Regency workshops.

Speech & Contemporary Issues

Offered to Grades 10, 11, and 12

Course Number 147

One Semester

This challenging course is for students who are interested both in improving their public speaking and in exploring issues of the day. Students will study historic speeches, learn the basics of effective rhetoric, learn effective presentation techniques, write and deliver expository and persuasive speeches, and participate in structured debate.

World Mythology*

Offered to Grade 12

Course Number 148

One Semester

This course provides a survey of major myths from various cultural/geographic areas. During the course, students learn to compare and contrast myths, identify common elements, and interpret the meaning of the myths in the cultural and historical context in which they were written. The course also examines themes or patterns, including the heroic journey, patterns of transformation, and mythic motifs.

Advanced Placement[®] English Literature & Composition

Offered to Grade 12

Course Number 150

Year

AP[®] English is a college-level course that offers an intensive study of American, British, and world literature. Students will read a combination of demanding fiction, poetry, drama, non-fiction, and literary theory and criticism. Students should expect to write frequent in-class, timed essays, discussion board explications, critical essays, and a research paper. Contributions to class discussion and oral presentations are expected. The rotating curriculum includes Greek and modern drama, novels by authors such as Tolstoy, Conrad, Chopin, García Márquez, Spark, Cather, and Morrison, and poetry from different cultures. Some of the novels are assigned in the summer reading list. Students are required to take the AP[®] exam in the spring. Students may be required to meet outside of class to complete a practice exam. Cost of the exam is \$95.

Prerequisites for AP[®] English:

- Assessment of the student by the English/writing teachers from grades 9, 10, and 11.
- Cumulative grade average of B+ for grades 9, 10, and 11 in English classes.
- A grade of B+ or above in Effective Writing.
- Completion of American Literature A and British Literature A.

Foundations in Writing

Offered to Grade 9 (upon department recommendation)

Course Number 161

One Semester

The goal of this course is to strengthen students' written expression. Students complete an intensive review of grammar and learn to use the writing process to create short assignments and essays that are organized, clear, and correct. Revision is stressed as an essential component of good writing. Students will examine models of writing and will also use articles to develop their research, note-taking, and summarizing skills.

Effective Writing

Required in Grade 10

Course Number 162

One Semester

This course, which is required for all students, emphasizes the reinforcement of the skills necessary for clear, creative, effective written expression. The course focuses on the review/reinforcement of specific usage and grammar units and the process and practice of good writing. Students learn to write for varied purposes and progress from single-paragraph assignments to persuasive letters to an I-search paper. Throughout the course, students are encouraged to develop their individual voices as writers.

Mathematics Department

The progression of required math courses is Algebra 1, Algebra 2, Geometry/Probability, Statistics, and Analytical Geometry.

REQUIRED COURSES

Algebra 1 - Level determined by testing and previous achievements.

Algebra 2 - Level determined by testing and previous achievements.

Geometry/Probability, Statistics, and Analytic Geometry - Level determined by testing and previous achievements.

Students in A level courses must have at least an 85 to continue with the next A level course.

Students registering for two math courses must meet the requirements for each course and receive the approval of their current math teacher and the math department chairperson. PSAT math scores and previous standardized testing are also considered.

****All students will be required to complete a summer math assignment.****

OPTIONAL: Math at Your Own Pace for “A” level courses only

Students progress through each course in Algebra 1A (271); Algebra 2A (273); Geometry A (275); Probability, Statistics, and Analytical Geometry A (277); and/or PreCalculus A (279) at their own accelerated pace utilizing an online adaptive mathematics program. As students work through topics, the teacher assists and explains concepts as needed. Formative and summative assessments are used to document student achievement. Real-life applications and problems will be stressed. Multiple courses may be taking place in the same classroom. If a student finishes one course before the end of the year, she may be able to begin the next course. Students should be self-directed and self-motivated and are expected to complete at home assignments in addition to class work. Students are expected to maintain at least an 85 to continue in the program. (Note: #s in parentheses are the course code numbers.)

Students must complete and submit a special request form to the department chairperson, who will consider the recommendation of the student’s current math teacher, history of achievement in math courses, and standardized test scores including the HSPT, PSAT, SAT, and/or ACT math sections.

Algebra 1A

Offered to Grade 9

Course Number 211 (traditional); at own pace 271

Year

Students with high math ability who have not had a full year of Algebra 1 will be considered for this course. Algebra 1 topics including linear and quadratic functions are covered with an emphasis on problem solving and applications using analytical and graphing techniques. Graphing calculators are used to investigate and verify findings.

Algebra 1

Offered to Grade 9

Course Number 212

Year

The Algebra 1 course presents the concepts of algebra in the context of solving real world problems. An emphasis is placed on the study of linear and quadratic functions and their graphs. Graphing calculators are used to investigate and verify findings.

Algebra 2A

Normally offered to Grades 9 and 10

Course Number 231 (traditional); at own pace 273

Year

This course begins with a brief review of Algebra 1 skills and then introduces more advanced algebra skills and concepts. Topics include quadratic equations and inequalities, matrices, exponential and logarithmic functions, and polynomial and rational functions. Circular trigonometry is introduced. Emphasis is placed on problem solving with applications taken from science and business. Graphing calculators are used.

Prerequisites for Algebra 2A:

- Current freshmen
 - 85 or above in Algebra 1A and approval of current math teacher
 - 95 or above in Algebra 1 and approval of current math teacher

Algebra 2

Normally offered to Grade 10

Course Number 232

Year

In this course, students work on improving their algebraic skills. Linear equations and inequalities are reviewed as well as basic operations with polynomials and rational functions. Quadratic, exponential, and logarithmic functions are important new topics. Topics in probability, statistics, and trigonometry are explored. Students learn to graph functions manually and with a graphing calculator. Word problems emphasize applications from science and business. Standardized test preparation is integrated throughout the course. Graphing calculators are used.

Geometry A

Offered to Grades 10 and 11

Course Number 221 (traditional); at own pace 275

One Semester

This course presents the concepts of Euclidean geometry and the relationship between geometry and algebra with an emphasis on analysis, logical reasoning, and the observation of patterns. Topics will include polygons, parallel and perpendicular lines, congruence and similarity, quadrilaterals, transformations, circles, areas of circles and polygons, and volumes of solid figures. Right triangle trigonometry will be introduced. Algebraic skills will be needed to solve problems involving real world applications. Technology is used to further enhance the study of geometric concepts.

Prerequisites for Geometry A:

- 85 or above in Algebra 2A and approval of current math teacher, or
- 95 or above in Algebra 2 and approval of current math teacher

Geometry

Offered to Grades 10 and 11

Course Number 222

One Semester

In this course, students study geometry and the relationship between geometry and algebra. Topics include polygons, parallel and perpendicular lines, congruence and similarity, quadrilaterals, transformations, circles, areas of circles and polygons, and volumes of solid figures. Right triangle trigonometry will be introduced. Algebraic skills will be needed to solve problems involving real world applications. Technology is used to further enhance the study of geometric concepts.

Probability, Statistics, and Analytical Geometry A

Offered to Grades 10 and 11

Course Number 223 (traditional); at own pace 277

One Semester

This course presents topics of probability including permutations, combinations, probability of compound events, odds, and probability distributions. Topics in statistics related to distributions of data and comparisons of sets are covered. In analytical geometry, the study of geometry using the coordinate plane will be explored and includes consideration of the properties of parabolas, circles, ellipses and hyperbolas. Graphing calculators and other technology are used in this course.

Probability, Statistics, and Analytical Geometry

Offered to Grades 10 and 11

Course Number 224

One Semester

This course presents topics of probability including basic probability, permutations, combinations, probability of compound events and odds. Topics in statistics related to distributions of data and comparisons of sets are covered. In analytical geometry, the study of geometry using the coordinate plane will be explored and includes consideration of the properties of parabolas, circles, ellipses and hyperbolas. Graphing calculators and other technology are used in this course.

ELECTIVE COURSES**Pre-Calculus A**

Offered to Grades 11 and 12

Course Number 229 (traditional); at own pace 279

Year

Topics include the study of the following functions and their graphs: polynomial, rational, exponential, logarithmic, and radical. Topics such as trigonometry, regression, sequences and series are emphasized. Juniors taking this course are prepared to take Calculus A in senior year. Seniors will be preparing for a calculus course in college. A TI-84+ calculator is required.

Prerequisites:

- 85 or above in Algebra 2A and approval of current math teacher, or
- 95 or above in Algebra 2 and approval from current math teacher and math department chairperson. PSAT math scores are also considered.

Advanced Pre-Calculus A

Normally offered to Grade 11

Course Number 230

Year

This course is divided into two parts. The first part covers advanced algebraic skills, circular trigonometry, sequences and series, parametric and polar equations, vectors, probability, and analytic geometry. In the second part, the following topics from calculus are introduced: limits, continuity, and derivatives. Students taking this course are preparing for AP[®] Calculus AB or BC. A TI-84+ calculator is required.

Prerequisites:

- 91 or above in PSAG A and approval of current math teacher, or
- 97 or above in Geometry and Algebra 2 and approval of current math teacher and math department chairperson. PSAT math scores are also considered.

AP[®] Calculus AB

Offered to Grades 11 and 12

Course Number 240

Year

This course covers topics of the Advanced Placement[®] Calculus AB curriculum. These include limits, continuity, and derivatives and integrals of elementary functions. Applications of derivatives and integrals are covered. Students should expect rigorous daily assignments. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. A TI-84+ calculator is required.

Prerequisites:

- 88 or above in Advanced Pre-Calculus A or a grade of 95 or above in Pre-Calculus A.
- Approval from pre-calculus teacher and department chair.

Calculus A

Offered to Grade 12

Course Number 241

Year

This course covers the topics of elementary functions, limits, continuity, the derivative and integrals. Applications of the derivative and integrals are incorporated into this course. Algebraic skills are further developed and strengthened throughout the year. A TI-84+ calculator is required.

Prerequisites:

- 85 or above in Pre-Calculus A and recommendation of math teacher.

Pre-Calculus

Offered to Grades 11 and 12

Course Number 243

One Semester

This course begins with a review of polynomial, rational, exponential, and logarithmic functions and their graphs. Function notation and operations are studied. Emphasis is placed on functions while reinforcing graphing and algebraic techniques. Sequences and series are also covered. A TI-84+ graphing calculator (required) is used throughout the course to aid in understanding the concepts. Approval of current math teacher is required.

Pre-Calculus

Offered to Grades 11 and 12

Course Number 244

Year

This course begins with a review of polynomial, rational, exponential, and logarithmic functions and their graphs. Function notation and operations are studied. Emphasis is placed on functions while reinforcing graphing and algebraic techniques. Sequences and series are also covered. Circular trigonometry is taught in the second semester. A TI-84+ graphing calculator (required) is used throughout the course to aid in understanding the concepts. Approval of current math teacher is required.

AP[®] Statistics

Offered to Grades 10, 11, and 12

Course Number 245

Year

This course is divided into four areas of study: 1) exploring data and observing patterns and departures from patterns; 2) planning a study – deciding what and how to measure; 3) producing models using probability and simulation; 4) learning how to make statistical inferences. Students make extensive use of the statistical features of the TI-84+ graphing calculator (required). Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. (continued on next page)

Prerequisites for AP[®] Statistics:

- 93 or above in previous A level mathematics courses.
- Approval from current math teacher and the department chair.

Statistics

Offered to Grades 10, 11, and 12

Course Number 247

One Semester

This course presents the basic ideas of statistics. Students learn about analyzing data, planning a study, producing models using probability and simulation, and making inferences. A TI-84+ graphing calculator is required. Approval of current math teacher is required.

AP[®] Calculus BC

Offered to Grades 11 and 12

Course Number 250

Year

Calculus BC is a full-year course in the calculus of functions of a single variable. It includes all topics covered in Calculus AB plus the following topics: analysis and derivatives of parametric, polar, and vector functions; Euler's method of solving differential equations; integration by parts and partial fractions; improper integrals; logistic differential equations; and Taylor and Maclaurin series. Students should expect rigorous daily assignments. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. A TI-84+ calculator is required.

Prerequisites:

- 93 or above in Advanced Pre-Calculus A.
- Approval from current math teacher and the department chair.

AP[®] Computer Science Principles

Offered to Grades 10, 11, and 12 (priority given to Grade 12)

Course Number 280

Year

AP[®] Computer Science Principles introduces students to the central ideas of computer science, instilling the concepts and practices of computational thinking and inviting students to understand how computing changes the world. The rigorous course promotes deep learning of computational content, develops computational thinking skills, and engages students in the creative aspects of the field. Students are also introduced to programming.

Students are required to complete two performance tasks which are submitted to the College Board as well as take the AP[®] exam in the spring. Cost of the exam is \$95; the fee will be added to the student's tuition bill.

Prerequisites for AP[®] Computer Science Principles: ability to be creative, work collaboratively as well as independently, and meet deadlines. Students must have had a B+ or better in Algebra 1 and have at least a 3.3 cumulative GPA.

Introduction to Computer Science

Offered to Grades 10, 11, and 12

Course Number 282 (semester)

Course Number 284 (year)

This online course, offered through Edhesive, is an interactive introductory course for students brand new to programming that teaches the foundations of computer science using the Python language. Not only will this semester- or year-long course prepare students for AP[®] Computer Science A and AP[®] Computer Science Principles, but it will teach students how to think computationally and solve complex problems, skills that are important for every student. (continued on next page)

The course includes web-based video classes, activities, and practice exercises; regular quizzes, projects and exams, auto-grading, progress tracking and gradebook and student support. Cost of the course in 2017 was \$85 per semester. This price may change in the 2018 - 2019 school year. See the website https://edhesive.com/courses/apcs_introduction for more details about this course.

Introduction to Computer Programming

Open to Grades 10, 11 and 12

Course Number 283

One Semester

Technology has a ubiquitous presence in our lives; computer code forms the basis of technology. In this course, students will learn the basics of computer programming including binary systems, data and algorithms. Students will code robots and light displays as well as design a game.

Freshman and Sophomore Minor Courses

Technology Resources

Non-credit, required in Grade 9

Course Number 954

One Semester, 1 day per cycle

The Technology Resource course will provide students with the 21st Century skills necessary for them to actively participate in the online global community in which they live. Students learn, understand, and utilize an array of technology skills such as: internet safety; moral, legal, and ethical uses of technology; cloud storage; multimedia applications; web tools: Google Docs, Office 365, blogs, wikis, and emerging technologies.

Math 9 and Math 10

Non-credit, required in Grades 9 and 10

Course Numbers 955 and 956

One Semester, 1 day per cycle

Students learn test-taking skills while reviewing math concepts. The goal is to help students become familiar with the types of problems on the math and science sections of the PSAT, SAT, and ACT.

Guidance 9

Non-credit, required in Grade 9

Course Number 957

Year, 1 day per cycle

Guidance 9 presents freshman students a goal setting curriculum for academic, social, and personal success. The school counselors introduce the class to the culture of Merion Mercy Academy with a focus on making healthy decisions and adjustments while transitioning to high school.

Media Literacy

Non-credit, required in Grade 9

Course Number 958

One Semester, 1 day per cycle

Students will investigate a combination of print and digital media to explore the ways in which media messages can shape our perceptions, beliefs, and attitudes. Throughout the semester, students will analyze, evaluate, and create different types of media. They will learn how to deconstruct a media message to determine the viewpoint of the creator and the text and subtext of the message. Students will become familiar with the various persuasion and creative techniques used in the creation of media and be able to identify the target audience of a message. The importance of a responsible digital footprint will be explored, as well as practices for good digital citizenship.

Science Department

REQUIRED COURSES

Biology, chemistry, and one additional science credit (chosen from courses numbered 330 or 340 to 356).

Scientific Methods, Applications, Reasoning, and Theory

Offered to Grade 9

Course Number 312

One Semester

This course is designed to serve as an introduction to the foundations of scientific study across the biological and physical sciences. Guided by the scientific method, this course emphasizes basic concepts in order to stimulate scientific curiosity and prepare students for further study within the discipline of science. Learning through inquiry, students develop skills for future science classes by following lab procedures, conducting lab experiments, and synthesizing data collected into formal lab reports. Topics of study include, but are not limited to, the chemistry of life, cell structure and function, the periodic table, balancing equations, significant digits, and motion. Students are required to use math and technical vocabulary to improve their proficiency in the foundations of science. A scientific calculator is required.

Biology A

Offered to Grades 9 and 10

Course Number 321

Year

In the Biology A course, emphasis is placed on depth of understanding and application of concepts. Students are expected to use inquiry and collaboration in lab work and projects. Topics include: evolution, the scientific method, biochemistry, cellular biology, DNA, bioengineering, genetics, classification and diversity, ecology, and human reproduction. Laboratory experiments, a summer reading assignment, an outside competition project, and science fair are integral parts of this course. A scientific calculator is required.

Ninth graders are placed in Biology A depending upon results of standardized testing and academic achievement. Tenth graders require department approval.

Biology

Offered to Grades 9 and 10

Course Number 322

Year

The core concepts of biology are covered in depth to provide a functional framework for subsequent study. Emphasis is placed on the following topics: biochemistry, molecular and cellular biology, DNA, bioengineering, evolution, genetics, microorganisms, infectious disease, dissection, and human reproduction. Laboratory experimentation, abstracts, and projects, including a science fair project, are integral parts of this course and are designed to improve the student's problem solving and research skills. A scientific calculator is required.

Chemistry A

Offered to Grades 9, 10, and 11

Course Number 331

Year

In the Chemistry A course, emphasis is placed on inquiry and quantitative applications of chemical concepts in both class and lab work. Topics include atomic structure, chemical bonding, chemical formulas, equations and reactions, kinetic-molecular theory, acid-base titrations, reaction kinetics, oxidation-reduction reactions, equilibrium, and nuclear chemistry. Work includes labs, science fair project, and research assignments. Chemistry A prepares the student for upper level science courses including AP[®] Chemistry. A graphing calculator or app is required. Department approval is required.

Chemistry

Offered to Grades 10 and 11

Course Number 332

Year

Students in this college preparatory course study the physical and chemical properties of matter and develop their quantitative skills. Atomic structure, chemical reactions, stoichiometry, kinetics, and acid-base analysis are covered in detail through lecture and labs. Work includes laboratory experiments, science fair, lab reports, projects, research papers, and demonstrations. Lab techniques are stressed throughout the course. A scientific calculator is required.

ELECTIVE COURSES

AP[®] Chemistry

Offered to Grades 10, 11, and 12

Course Number 330

Year

This course is designed to be the equivalent of a two-semester college introductory chemistry course for science majors and uses the revised guidelines defined by the Educational Testing Service in preparation for the Advanced Placement[®] examination. The aim of the course is to develop problem-solving skills in chemistry through a logical approach to quantitative problems, laboratory work, and analysis of chemical reactions.

The major topics covered are atomic structure, stoichiometry, solutions, gases, thermochemistry, chemical bonding, chemical kinetics and equilibria, acids and bases, and electrochemistry.

Due to lab requirements, experiments will be conducted biweekly on Wednesday G-bell mornings from 8:00 to 8:55 a.m. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. An AP[®] lab fee of \$25 is also assessed. A graphing calculator is required. Time commitment: 6 hours weekly.

Prerequisites:

- Students must have the following grades: B+ in Chemistry A (and Biology A, if taken) or an A in both Biology and Chemistry. Students can take AP[®] Chemistry after completing Chemistry whether or not they have completed Biology.
- Department approval by interview is required.

AP[®] Biology (not offered 2018-19)

Offered to Grades 10, 11, and 12 in alternate years (2019-2020 & 2021-2022)

Course Number 340

Year

This course is designed to be the equivalent of a rigorous college-level introductory course. Following the revised guidelines of the Educational Testing Service, the course is organized around four big ideas and seven science practices. The course emphasizes conceptual understanding and inquiry-based learning experiences with differentiated instruction, targeting various learning styles and interests.

The course is unified through the following ideas: One, *The process of evolution drives the diversity and unity of life*; Two, *Biological systems utilize energy and molecular building blocks to grow, reproduce, and maintain homeostasis*; Three, *Living systems retrieve, transmit, and respond to information essential to life processes*; Four, *Biological systems interact, and these interactions possess complex properties*.

The seven practices emphasized are: using models to communicate scientific phenomena; using math appropriately in scientific investigations; engaging in scientific questioning to guide their investigations; planning, implementing and collecting data in scientific investigations; performing data analysis; proposing scientific explanations and theories; connecting and relating knowledge across various scales, concepts and domains. (continued on next page)

Due to lab requirements, some labs are performed during class time; others are performed on the weekends as agreed upon by the class. In addition, experiments will be conducted periodically on Wednesday G-bell mornings from 8:00 to 8:55 a.m. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. An AP[®] lab fee of \$25 is also assessed. A scientific calculator is required. Time commitment: 6 hours weekly.

Prerequisites: Students must have the following grades: B+ in Biology A (and Chemistry A, if taken) and/or an A in both Chemistry and Biology. Department approval by interview.

Physics A

Offered to Grades 11 and 12

Course Number 341

Year

This quantitative course is designed for students with an interest in a science, engineering, or math major. Emphasis is placed on problem solving and using problems to expand understanding of the principles in physics. Because the language of physics is essentially mathematics, a working knowledge of algebra, geometry, and basic trigonometry is required. Topics include mechanics, vibrations and waves, sound, optics, and electricity and magnetism. Students will participate in the SeaPerch competition in the second semester. Students in Calculus A or AP[®] Calculus are strongly encouraged to take Physics A. A graphing calculator is required. Departmental approval is required.

Prerequisite: B+ in Algebra 2A; B in Chemistry A or B+ in Chemistry

Physics

Offered to Grades 11 and 12

Course Number 342

Year

This is a college preparatory course with an emphasis on both conceptual understanding and problem solving. A working knowledge of algebra, geometry, and basic trigonometry is required. Topics covered include mechanics, dynamics, circular motion, vibrations and waves, sound, optics, electricity, and magnetism. Work includes labs, a semester research project, and a science fair project. A scientific calculator is required.

Prerequisite: Chemistry. Approval of current or most recent science teacher is required.

Physiology A

Offered to Grades 10, 11, and 12

Course Numbers below

One or Two Semesters

Semester 1 only, course code 361; Semester 2 only, course code 362; Full year, course code 351

This is a basic introductory course in the major systems of the body and their integrated functions. Equal attention is given to both the structures of the organs comprising each system and the function that those structures perform. The material covered includes biochemical pathways, common abnormalities, and practical applications. Emphasis is placed on the student's future ability to make decisions that will require biological fact and reasoning. Emphasis is also placed on women's health issues and diseases.

Physiology A can be taken as a year course or as a semester course. The topics covered for **Semester One** are: Tissues, Integumentary system, Skeletal system, Cancer, and the Senses. Students in semester one take a mid-term exam. **Semester Two** topics are: Muscular, Cardiovascular, Digestive, Nervous, and Reproductive systems and Pregnancy, Growth, and Development. Students in semester two complete the Annenberg High School Symposium Project in lieu of a final exam. (continued on next page)

The course work includes a summer reading project, lab work, dissection, and a final project in the second semester. Shadowing for one week at a local hospital or research facility is an option for extra credit. A scientific calculator is required.

Prerequisite: Students are required to have the following grades: B+ in Biology A or an A in Biology CP.

AP[®] Environmental Science

Course Number 350

Offered to Grades 11 and 12 in alternate years (2020-2021 & 2022-2023)

Year

This course is designed to be the equivalent of a college introductory environmental science course and uses the guidelines defined by the Educational Testing Service in preparation for the Advanced Placement[®] exam.

This course provides the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students identify and analyze environmental problems both man-made and natural, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Topics include population, systems, biodiversity, ecological restoration, agriculture, geology, land management, pollution, toxicology, energy, water use, climate and change, and urban environments.

On a need basis, additional time for lab work or exam review may be scheduled.

Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. An AP[®] lab fee of \$25 is also assessed. A graphing calculator is required. Time commitment: 6 hours weekly.

Prerequisites:

- Students must have the following grades: B+ in both Biology A and Chemistry A, an A in both Biology and Chemistry, or an A in Earth Science.
- Department approval by interview.

Environmental Science

Course Number 352

Offered to Grades 11 and 12 in alternate years (2020-2021 & 2022-2023)

Year

This course highlights the interdependence of life on earth by studying the physical, biological, and geological aspects of our environment. Topics covered include ecology, biomes, biodiversity, populations, and water, land, air, agriculture, mineral, and energy resources. In addition, emphasis is placed on the importance of human impact on the environment and highlights ways to reduce negative consequences to the environment. The course also incorporates lab and fieldwork in order to develop observational and data collection skills with special emphasis on improving research and critical thinking.

This course complements Earth Science (offered in alternate years) which focuses on understanding inanimate forces that shape our earth.

A scientific calculator is required. Approval of current science teacher is required.

Biotechnology and Bioethics

Offered to Grades 10, 11, and 12 in alternate years (2020-2021 & 2022-2023)

Course Numbers below

One Semester or Year

Semester 1 only, course code 353; Full year, course code 354

This course provides an historical approach to recent discoveries in the area of biotechnology. These discoveries are then viewed through their impact on medicine, culture, and industry. We also investigate the bioethical implications of these discoveries on our present and future societies. **Semester one** topics include but are not limited to: Biotechnology Century and its Workforce; Nobel Class women scientists; history of key discoveries in DNA structure, function, and engineering; an introduction to genes and genomes; recombinant DNA technology; microbial biotechnology; and stem cells and cloning. **Semester two** topics include but are not limited to: DNA and forensic analysis; plant, animal and medical biotechnology and ethics; and biotechnology. Labs include: DNA finger printing; DNA extraction and gene expression in bacteria; genetic transformation in bacteria; and DNA in forensic analysis. Assessments include article abstracts, quizzes, lab reports, and tests. A paper and presentation replace the mid-term and final exams. A scientific calculator is required.

Prerequisites: B in Biology A or B+ in Biology CP; semester one is a prerequisite for semester two.

Earth Science (not offered in 2018-2019)

Offered to Grades 11 and 12 in alternate years (2019-2020 & 2021-2022)

Course Number 356

Year

The focus of this course is on understanding inanimate forces that shape our earth. The branches of earth science included are geology, oceanography, and meteorology. Topics include minerals, rocks, fossils, geologic time, plate tectonics, earthquakes, volcanoes, weathering, erosion, rivers, groundwater, glaciers, weather, climate, ocean basins, ocean water, and movements of the oceans.

The labs and activities for this course include demonstrating concepts such as modeling earthquake waves, re-creating continental collisions, and testing for soil permeability. Making and reading topographic maps, mineral identification, soil chemistry, and ocean water density are a few of the areas studied. Included in this course is a yearly study of weather patterns and seasonal light changes. A scientific calculator is required.

This course complements Environmental Science (offered in alternate years) which focuses on the interaction between humans and their planet.

Social Studies Department

Students are required to complete three years of Social Studies courses. This includes the following options:

- Grade 9: Cultures in World History
- Grade 11: Modern U. S. History or A^P[®] U. S. History
- Grade 12: U.S. Government (CP), U.S. Government A or AP[®] U. S. Government

Students will select from the various one semester electives courses below to complete the final semester requirement. Students may exceed the minimal requirements if they seek a deeper exploration of the Social Studies.

REQUIRED COURSES

Cultures in World History

Offered to Grade 9

Course Number 412

Year

Opening with a definition of “What is culture?” this course gives the student an overview of the various predominant cultures which have survived throughout history. Beginning with a look at the Golden Age of Greece and Rome, the course proceeds to examine the development of Christianity and the influence of the Germanic people on the formation of Europe. A survey of Europe includes studies in Feudalism, the Renaissance and Reformation, and the Enlightenment. We also examine the growth of Islam in the Middle East and Dynastic China. A look at present day concerns also play an integral part in the understanding of these cultures.

Modern United States History

Offered to Grade 11

Course Number 432

Year

This course begins with the major events of the early 1900s: industrialization, immigration, and urbanization with an analysis of their effects on national politics and foreign policy. The political, social, economic, and diplomatic aspects of World War I, World War II, the Cold War, Korean War, Vietnam War, and the wars in Iraq and Afghanistan are examined. Discussion and analysis of current events and how they correlate to history are used to increase the students’ global awareness. The course is designed to develop in the student the analytical skills and factual knowledge necessary to deal critically with the issues of society. The student is challenged to explore the past for its relevance to the present.

AP[®] United States History

Offered to Grade 11

Course Number 439

Year

This Advanced Placement[®] course is intended for qualified students who wish to complete a college introductory course in secondary school. The course deals with extensive chronological coverage and readings on a broad variety of topics in such fields as economic history, cultural and intellectual history, social history, and political-constitutional history. In preparation for the AP[®] test, topics begin with the settlement of the New World in 1492 and continue on to the present day problems for the most recent U.S. immigrants. Students learn to assess historical materials and various interpretations presented in historical scholarship, develop skills necessary to arrive at conclusions on the basis of an informed judgment, and present these conclusions in well-expressed essays.

Coursework requires 6 hours of study a week. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95. (continued on next page)

Prerequisites:

- Two teacher recommendations: Social Studies and English
- A grade of A or above in World Cultures and English (CP level) for consideration
- A grade of B+ or above in English A
- A cumulative GPA of 3.7 or above
- Evidence-based reading and writing PSAT score will be taken into consideration
- Submission of a writing sample from the student's portfolio
- Departmental evaluation of all materials

AP[®] U. S. Government and Politics

Offered to Grade 12

Course Number 440

Year

This Advanced Placement[®] course is designed to give students a critical perspective on politics and government. Topics for this course include an examination of the historic background against which the Constitution was drafted, the Articles of Confederation, the powers and responsibilities of the three branches of government, the effects of the two-party system, the presidential election process, and the progression of legislation through Congress. Major research projects are assigned, including a reenactment of the Constitutional Convention of 1787. By looking at current domestic and foreign policy issues and political trends, students realize the need for an informed electorate and responsible citizenship in a democratic society. A solid foundation in American history is very helpful but not required. Students must have strong writing skills. Class participation is emphasized and integrated throughout the course. Completion of course also fulfills 3 year requirement of Social Studies.

Coursework requires 6 hours of study a week. Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95.

Prerequisites:

- Two teacher recommendations
- A grade of A or above in U. S. History or a B+ or above in AP[®] U. S. History for consideration
- A grade of A or above in English CP or a B+ or above in English A
- A cumulative GPA of 3.7 or above
- Evidence-based reading and writing PSAT score will be taken into consideration
- Submission of a writing sample from the student's portfolio
- Departmental evaluation of all materials
- AP[®] U. S. History is strongly encouraged but not required

United States Government A

Offered to Grade 12

Course Number 441

One Semester

This course offers a more accelerated study of American Government. The course begins with a study of the principles, formation, and types of governments that have been developed throughout history. It next examines the historic background against which the country was founded and the Constitution was drafted. Specific attention is given to the problems plaguing the country under the Articles of Confederation and the great challenge of the Founding Fathers to create a new government. Students study, in depth, the powers and responsibilities of the three branches of government. The effects of the two-party system, the presidential and congressional election process, and the progression of legislation through Congress are examined. By looking at current domestic and foreign policy issues and political trends, students realize the need for an informed electorate and responsible citizenship in a democratic society. Oral expression is also an integral component of this course. (continued on next page)

Prerequisites:

- A grade of A- or above in Modern U. S. History or a B+ or above in AP[®] U. S. History for consideration
- A GPA of 3.5 or above and PSAT scores of 550 or above in evidence-based reading and writing
- Departmental evaluation of all materials and approval

United States Government

Offered to Grade 12

Course Number 442

One Semester

This course begins with a study of the principles, formation, and types of governments that have been developed throughout history. It next examines the historic background against which the country was founded and the Constitution was drafted. Specific attention is given to the problems plaguing the country under the Articles of Confederation and the great challenge of the Founding Fathers to create a new government. Students study, in depth, the powers and responsibilities of the three branches of government. The effects of the two-party system, the presidential election process, and the progression of legislation through Congress are examined. By looking at current domestic and foreign policy issues and political trends, students realize the need for an informed electorate and responsible citizenship in a democratic society.

ELECTIVE COURSES

Economics in Our Modern Society

Offered to Grade 10, 11, and 12

Course Number 452

One Semester

What is our economic system all about? How do events such as the election of a new president or even the Super Bowl affect the trading on Wall Street? What is money? These and other similar questions are discussed in this elective course. Major topics to be discussed include a comparison of capital and command economic systems; a detailed study of supply and demand economic theories; the responsibilities attached to credit; advertising; methods of saving and investing; and investigations of the stock market and the tax system.

Students participate in the Junior Achievement Applied Economics program. Under the guidance of a consultant from the business world, student owners create and liquidate a company over the course of the semester. Through this experience, students learn about the organization of a corporation, the marketing and sale of a product, and the commitment necessary for a successful business.

Psychology

Offered to Grades 11 and 12

Course Number 454

One Semester

This elective course provides a general overview of the main principles and applications of psychology. Students study psychology as a social science and develop an in-depth understanding of individual behavior and mental processes. The following topics will be covered during the semester: history and schools of psychological thought, the interaction of heredity and the environment, sleep and dreams, intelligence, stages of development, personality theories, and psychological disorders. Students research and present a student seminar on a current topic in psychology. Class participation is stressed and integrated throughout the semester.

Sociology

Offered to Grades 11 and 12

Course Number 456

One Semester

This elective course provides a general overview of the main principles and applications of sociology. Students study sociology as a social science and develop an understanding of human society and social behavior. The following topics are covered during the semester: history of sociological thought, cultural diversity and interaction, social structure, deviance and social control, social stratification, social institutions, social change, and group dynamics. Students research and present a student seminar on a current topic in sociology. Class participation is stressed and integrated throughout the semester.

**Themes in United States History
Through the Reconstruction Period**

Offered to Grades 10, 11, and 12

Course Number 457

One Semester

This elective course provides a survey of United States history from the colonial period through the Civil War and Reconstruction. The following topics are covered in this course: our European heritage, problems of colonial settlement, the achievement of political independence and stability, territorial expansion, industrialization, and the struggle over slavery. Through examining primary sources and a variety of other documents, students will hone their analytical skills to gain a better understanding of our foundation and the people and events that still impact our nation today.

**Themes in United States History A
Through the Reconstruction Period**

Offered to Grades 10, 11 and 12

Course Number 458

One Semester

This course covers the essential topics of Themes in United States but with greater depth and alternative assessments with the specific design to prepare sophomores to take AP[®] US History their junior year. Greater emphasis is placed both on analyzing primary and secondary sources and thesis based writing and document based essays. Exercises and instruction of the course material will also model that employed in AP[®] US History. Juniors and seniors who have not taken AP[®] US History may take this course provided they meet the following prerequisites:

Prerequisites:

- Recommendation of 9th grade Cultures in World History teacher
- A grade of A- or above in World Cultures and English (CP level) for consideration
- A grade of B+ or above in English A
- A cumulative GPA of 3.7 or above
- Departmental evaluation of all materials

World Geography

Offered to Grades 10, 11, and 12

Course Number 459

One Semester

As the world becomes ever smaller due to the media and the Internet, we are called upon to understand where we are in relation to the rest of the world. This course reinforces map skills and the use of geographic terms. We study how geography affects the cultures of various regions throughout the world, specifically the Middle East, Latin America, Southeast Asia, Australia, and South Asia. Each region is studied through the lens of the Five Themes of Geography, focusing on physical geographic characteristics and human-environment interaction. Current events are discussed in the context of how the geography plays a role in the events that are unfolding, thereby giving the student a greater understanding.

Introduction to Law

Offered to Grades 10, 11, and 12

Course Number 462

One Semester

This course serves as a pragmatic introduction into the field of law. Students survey the foundational fields of law to understand and distinguish their essential substantive and procedural principles. Throughout the course, the instructor emphasizes application over memorization of the law as a means of giving the students a sense of the “law school experience.” Further mindful of the values of Merion Mercy, students explore the philosophical and social underpinnings of the American legal system throughout the semester. Units for this course include introduction to the Court System, Criminal Law, Tort Law, Contractual Law, and Family Law. Sophomores who wish to take the course must receive approval from the Social Studies department chair.

Online Courses

Online Social Studies courses: in recent years some students have chosen to take online courses such as AP[®] Microeconomics, AP[®] Macroeconomics, and AP[®] Psychology through APEX Learning. Cost of each course in 17-18 was \$350. Some students have taken AP[®] World History through Georgia Virtual School or Montgomery Virtual Program. Other AP[®] social studies courses such as AP[®] Human Geography or AP[®] European History are also possible. Students considering taking an online AP[®] course must attain permission from the assistant head of school for academic affairs. See page 37 for further information about taking online courses.

Language Department

Students beginning a language are required to take at least two years of that language, though they are strongly advised to take at least three years. Every student taking a language will need the signature of her current language teacher approving her selection. This is required for every level of language study.

Classical Language

The Classical language program seeks to develop an understanding of and appreciation for the richness and complexity of the Latin language. Though no longer actively spoken, Latin thrives in the classroom through Latin composition and occasional oral conversation and drills. Students also discover the interdisciplinary nature of Latin through the study of Classical literature, history, culture, philosophy, mythology, and anthropology. The study of Latin enables students to develop sharper critical thinking skills, discipline for organization and persistent study, and a true understanding of the importance of the liberal arts. All Latin students participate in the National Latin Exam in March.

Latin 1A

Course Number 511

Year

This course introduces students to the fundamental grammatical concepts and unique structures of the Latin language. Through daily practice of vocabulary and grammar, students develop new skills for translating sentences and simple stories. Additionally, students are able to discover many similarities between Latin and the English language, especially as Latin relates to English vocabulary. Time is also spent exploring Roman culture, history, mythology, and geography.

Latin 2A

Course Number 521

Year

In this course, students continue to learn the major grammatical forms and constructions of the Latin language, thereby developing a greater proficiency in the language. Mastery of new concepts is sought through extensive memorization and application of new grammatical skills through oral and written drills. Reading comprehension is strengthened through selected adapted passages from *The Twelve Labors of Hercules* and *The Argonautae*. Latin 2A culminates in the translation of authentic Latin literature such as Caesar's *De Bello Gallico* and Ovid's *Metamorphoses*. Students are encouraged to connect with and interpret the language in an authentic way while noticing the grammatical structures of the language. These readings not only improve a student's comprehension and translation skills, but also provide a didactic orientation to authentic Latin history, culture, and mythology.

Latin 3A

Course Number 531

Year

(This course is open to those students who have successfully completed Latin 2A.)

Students develop advanced translation skills in this advanced reading course. A student's thorough retention of vocabulary and grammar from the first two years of study helps to make this course particularly fruitful and enjoyable. Through translation, analysis, and occasional delivery of Ciceronian prose, students come to understand the intricate, idiomatic use of the Latin language, as well as the art of rhetoric. Cicero's first oration against the treasonous Catiline (*In Catilinam*) is read in the first semester. This oration provides a comprehensive orientation to oratory, rhetorical devices, and the political events of the late Republican Rome. In the second semester, students explore the lyric poetry of Catullus, offering a fuller picture of the late Republican Rome and introducing certain poetic devices and themes. Throughout the year, students closely study the roots of words, expanding and maturing their English vocabulary. Students are encouraged to produce textually accurate, but natural translations, as they strive to communicate ideas, not merely words. Students are strongly encouraged to take the SAT II in Latin at the end of this course.

Latin 4A

Course Number 541

Year

This course is the culmination of three years of hard work, as well as the beginning of the transition of the study of Latin at the high school level to its study at the collegiate level. Vergil's *Aeneid*, one of the foremost epic poems in Western literature, is studied at length during this year. Students gain a thorough understanding of epic as a genre through oral practice and mastery of dactylic hexameter. Students come to recognize the sophistication of Latin poetry—its unique grammatical constructions, innovative literary devices, and thematic ingenuity. In addition, students explore Augustan Rome as reflected in the *Aeneid*, the role of women in the epic, Vergil's indebtedness to Homer, the focus on human suffering and personal sacrifice, and the timelessness of Vergil's themes. Students conclude the course with an understanding of and appreciation for the impact Vergil has made—and continues to make—on literature throughout the ages.

Modern Languages

The modern language program at Merion Mercy Academy seeks to instill in our students a sincere appreciation and understanding of other peoples and cultures while incorporating three essential modes of communication: interpretive, interpersonal, and presentational. Language instruction begins first with the essential interpretive mode of reading and listening to the target language, which lays the foundation for the next stage of language acquisition, namely writing and speaking in the target language. Development of these skills allows for production of language in both presentational writing and speaking interpersonal communication.

All A level French and Spanish students participate in the National French and Spanish exams in March.

French 1 (CP)

Course Number 515

Year

The goal of this course is to introduce and initiate the multiple language skills of listening, speaking, reading, and writing French. Audio-lingual exercises are designed to guide and improve pronunciation. Communication activities, CD and video programs, and visual materials are implemented to further help students understand and respond in French. Students are taught basic grammatical points such as the present tense of regular verbs, definite and indefinite articles, agreement of adjectives and nouns, formation of interrogative and of negative sentences. In turn, students will begin speaking and writing simple sentences in the target language. Classroom activities and research projects enhance the appreciation of various aspects of French and Francophone cultures. At the completion of French 1 students are able to speak with accuracy, write simple sentences, and read level-appropriate texts in the target language.

French 2A

Course Number 524

Year

The goal of this course is to further develop the listening, reading, speaking and writing skills established in the first year of study. Learning new grammatical structures and building on vocabulary receive particular emphasis with the purpose of increasing correct communication patterns. In addition, students are exposed to authentic resources in order to complete different tasks that reflect the three modes of communication: interpersonal, interpretive, and presentational. During the second semester students continue to develop reading comprehension skills through selected readings in French, while learning more about the French-speaking world.

French 3A

(This course is open to those students who have successfully completed French 2A.)

Course Number 534

Year

The aim of this course is to increase a student's proficiency in the French language through the study of advanced grammatical structures, extensive vocabulary, and the use of natural language in context. Students address a variety of topics concerning the realities of Francophone culture. Critical reading ability is developed through the use of authentic short stories and literary or journalistic excerpts, while a variety of audio-visual materials improve students' ability to comprehend and interpret spoken French. The student's ability to speak and write in the target language is enriched through various projects. At this advanced level, the majority of class discussions are conducted in French.

French AP[®] and 4A

Course Number 543 (AP[®]); 544 (4A)

Year

The goal of this course is to further develop a student's fluency in verbal communication and in reading competence. Vocabulary is further expanded and enriched. Written communication is emphasized for greater grammatical accuracy as well as for depth of content. Selected readings from classical and contemporary French and Francophone literature are used to develop techniques of analysis and in-depth comprehension as well as an appreciation of literary style content. French 4A and AP[®] are scheduled as a combined class.

Students in the AP[®] level are required to take the AP[®] exam in the spring. Cost of the exam is \$95.

Prerequisites for AP[®]:

- The student makes an appointment with the teacher for an interview to discuss the following:
 - Explanation of the workload entailed
 - Grades in previous language courses
 - The number of AP[®] courses to which the student is committing herself
 - Because the 4A and AP[®] courses are a combined class, AP[®] students must commit themselves to an additional 3 - 4 hours of work per week beyond the normal requirements of the class
- Department approval

Spanish Offerings

Spanish 1A

Course Number 517

Year

The goal of this course is to prepare students to be competent in Spanish as delineated in the National Standards of Foreign Language Learning: communication, cultures, connections, comparisons, and communities. The subject matter is presented in the target language. Communicative activities, video programs, audio-lingual exercises, and other authentic materials are used to guide the students toward an appropriate level of proficiency. Students are directed in writing and level-specific readings in Spanish. At the completion of the course, students are able to communicate about subjects within the range of their experience.

Spanish 1

Course Number 518

Year

While the content of this course is essentially the same as that of level A, the material is presented at a slower pace. The students in the course devote time to developing oral and written skills. At the completion of Spanish 1 students are able to speak with accuracy, write simple sentences, and read level-appropriate texts in the target language.

Spanish 2A

Course Number 527

Year

The goal of this course is to build on the listening and speaking skills acquired at the first level. The guided conversation experienced at the first level is expanded to creative expression with opportunities to state opinions and express feelings and reactions in Spanish. Students are given directed readings about their contemporaries in Spain and Latin America, traditional customs, as well as historical and cultural points of interest. In the second semester, the students read short novels to reinforce directed reading skills. Contemporary Spanish-speaking culture is presented through a program of audio-visual materials in the target language, including many authentic resources.

Spanish 2

Course Number 528

Year

The goal of this course is to further develop the skills acquired in Spanish 1: to speak with accuracy, to understand spoken Spanish, to write clearly, and to understand Spanish texts. An appreciation of the Spanish-speaking world is developed through readings and activities that reflect the everyday lifestyles of the cultures. These texts present views of many Spanish-speaking countries. In the second semester, greater emphasis is placed on consistent and more frequent use of the Spanish language in class in order to prepare students for the transition to Spanish 3.

Spanish 3A

Course Number 537

Year

(This course is open to those students who have successfully completed Spanish 2A.)

This course aims to bring students closer to proficiency in the Spanish language by studying advanced grammatical forms and structures, vocabulary, and idiomatic usage. Emphasis is placed on the development of reading ability through the use of authentic resources along with expository writing in response to those texts. At this advanced level, frequent pair and class discussions in the target language about contemporary issues affecting Spain and Latin America as well as cultural comparisons with the United States allow for a more student-centered learning environment. Successful completion of this course provides a smooth transition to Spanish 4A or AP[®] Spanish in the following year.

Spanish 3

Course Number 538

Year

(This course is open to those students who have successfully completed Spanish 2.)

The goal of this course is to enhance speaking, listening, reading, and writing skills. Grammatical structures continue to be stressed systematically in exercises and in free-response conversational situations. Reading skills are expanded through an exploration of various types of literature. A variety of audio-visual materials and authentic resources supplement the program. At this level students are expected to speak in Spanish for all basic communication while more advanced speaking skills necessary for real-life situations are developed through pair activities, skits, projects, and class discussions. Upon successful completion of this course, students are prepared for a CP level Spanish course in the fourth level.

Spanish 4AP[®]

Course Number 546

Year

The Advanced Placement[®] Spanish course emphasizes the superior development of the three modes of communication: interpersonal (active written or oral communication between two or more parties), interpretive (interpretation of meanings that occur in written or spoken form), and presentational (communication of messages intended for target audience).

College credit and advanced standing in university courses can be earned upon the successful completion of the course and the AP[®] exam given in May. Oral proficiency with a native-like fluency, in addition to expository writing for accuracy and depth of content, is stressed throughout the course. The reading of representative authors of Spanish-speaking literature and print media is an integral part of the course in order to develop advanced techniques of analysis, in-depth comprehension, and an appreciation of literary style. In addition to the regular course material, extra practice assignments are given. AP[®] Spanish and Spanish 4A are normally scheduled as a combined class.

Students are required to take the AP[®] exam in the spring. Cost of the exam is \$95.

Prerequisites for AP[®]:

- The student makes an appointment with the teacher for an interview to discuss the following:
 - Explanation of the workload entailed
 - A commitment to adhere to class attendance policy
 - Grades in previous language courses
 - The number of AP[®] courses to which the student is committing
 - Determination and ability to work on outside assignments
- Department approval

Spanish 4A

Course Number 547

(This course is open to those students who have successfully completed Spanish 3A.)

Year

This course solidifies students' command of advanced grammar and syntax. Authentic sources such as news broadcasts, radio interviews, and periodicals are used frequently in order to stimulate primarily student-centered class discussions, raise an awareness of current events in the Spanish-speaking world, and strengthen linguistic proficiency. Written communication is emphasized for accuracy and for depth of content. Students also exposed to various genres of literature as well as study history and civilization from various Spanish-speaking countries. AP[®] Spanish and Spanish 4A are generally scheduled as a combined class.

Spanish 4

Course Number 548

(This course is open to those students who have successfully completed Spanish 3.)

Year

This course is designed to enhance the skills already acquired in previous Spanish levels. Emphasis is placed on the further development of oral skills and proficiency in Spanish. Readings of representative Spanish-speaking authors and discussion of their works increase comprehension skills and improve proficiency with the spoken language. Students increase their awareness and understanding of the Spanish-speaking world through art, history, and civilization. Exposure to these authentic resources encourages them to engage in discussion and express opinions in the target language. A variety of audio-visual materials about current topics supplement the program.

Mandarin Chinese 1 (Online Course)

Offered to Grades 11 and 12

Course Code 561/562

A-level; semester one (561) and/or semester 2 (562)

Chinese 1 is a beginning level course that will introduce the student to a variety of areas of Mandarin Chinese (Simplified). In this course, students will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese-speaking world and their culture, people, geographical locations, and histories.

Keystone's Foreign Language courses have been carefully designed to meet the standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Unit activities blend different forms of communication and culture to ensure that the student meets all standards.

Chinese is an online course offered through The Keystone School online or other approved site. See <https://hs.keystoneschoolonline.com/KeystoneOes/portlets/catalog/displayCourseAction.do> for more information. Cost is approximately \$400 for a year course (subject to increase). Students may take a semester course (\$300).

Students must receive approval from their current language teacher, who will consult with the Language Department chair.

Art Department

REQUIRED COURSE

Art 9

Non-credit, required in Grade 9

Course Number 952

One Semester, one day per cycle

This freshman course is an introduction to the visual arts through lessons in studio art and aesthetics. The major thrust of the studio component is in drawing with exercises exploring the elements of art: line, shape, color, value, texture, and space. Art criticism and aesthetics are explored through the study of individual works of art. Students are expected to formulate an understanding and appreciation for the visual arts, determine their level of interest in pursuing further courses in art, and recognize their capabilities working in the visual arts.

ELECTIVE COURSES

Art Major 1A

Offered to Grades 10, 11, and 12

Course Number 721

Year

This course is an introduction to the fundamentals of two and three-dimensional design. The elements of art are studied through exploration of various media: pencil, charcoal, acrylic and watercolor paint, pen and ink, relief printing, and sculptural and collage materials. Foundation drawing skills are applied to portrait and figure studies in addition to still life and landscape. Lessons in graphic art explore creative design in relation to the guiding principles of art.

Prerequisites: Presentation of six recent pieces of art and a brief essay stating the reasons for studying art as an elective course. An interview with the art teacher must take place before the course selection sheets are due. The \$250 fee for art supplies will be added to the tuition bill.

Art Major 2A

Offered to Grades 11 and 12

Course Number 731

Year

This course presents a more intensive investigation of art principles as expressed in perceptual and conceptual compositions. Media explored include pencil, charcoal, acrylic paint, pen and ink, watercolor, pastels, and sculptural and collage materials. Digital design is introduced to aid in answering more challenging design problems. Fine Art and Graphic Art are studied as dual approaches to the study of art, which broaden student understanding of the possibilities for careers in the visual arts. Watercolor, acrylic paint, and pastel techniques are applied to painting exercises in still life, landscape, portrait, figure studies, and conceptual pieces. Semester projects of independent choice allow for individual discovery and expression.

Prerequisites: Students must have exhibited a positive desire to pursue more complex art skills and be motivated to achieve a standard of excellence. The \$250 fee for art supplies will be added to the tuition bill.

Art Major 3A

Offered to Grade 12

Course Number 741

Year

Students continue to strengthen skills in the Fine and Graphic Arts. As more challenging design and color problems are presented in a variety of traditional media and digital media applications, students finely tune their understanding, appreciation, and execution of multiple approaches to painting as viewed in Imitational, Formalistic, and Expressionistic Art. Landscape, still life, figure, and portrait studies continue in various media. Contemporary art is studied as motivation for the student's search for a personal form of expression. Students who are interested in applying to college art programs are aided in compiling a visual art portfolio. (continued on next page)

Prerequisites: Students must have exhibited a positive desire to pursue more complex art skills and be motivated to achieve a standard of excellence. The \$250 fee for art supplies will be added to the tuition bill.

Principles of Design 1

Offered to Grades 9, 10, 11, and 12

Course Number 752

One Semester

This course is designed for students who are passionate about creating art, but are not currently enrolled in the Art Major program. This course concentrates on the design and compositional elements that exist in design and art of modern times. Drawing, painting, digital art, and sculptural exercises are drawn from traditional methods and employ working from imagination and observation. Media employed include pencil, oil pastels, acrylics, photography, sculpture, and collage materials. Students are introduced to the computer as an aid to developing art ideas and creating art. Students develop thinking skills necessary to envision possibilities for creative solutions to problems, which can then be applied in many fields of study. The \$125 semester fee for art supplies will be added to the tuition bill.

Make Art History!

Offered to Grades 10, 11, and 12

Course Number 753

One Semester

This course is designed to offer the best of both worlds by bridging two approaches to art: the history of art and art making. This course is offered to students interested in the role that art has played throughout history and in directly applying this knowledge by creating related art in a studio environment. This combined art history and art studio course surveys major historical periods and themes of art in which students will learn that since prehistoric times, art has been created in a social and cultural context. A survey of the impact of global events on art movements is followed by hands-on studio experiences, in the style and ideas relating to the lessons. Students are introduced to two and three-dimensional design including drawing, painting, and sculpture. The course includes lecture, presentation of images of related art objects, and discussion followed by the creation of art. Reading assignments are required. Grading is comprised of assessments of the student's understanding of the artwork's historical context and of her related art work.

Required: a curiosity about how world events have influenced art and a desire to make art. The \$75 semester fee for art supplies will be added to the tuition bill.

Principles of Design 2

Offered to Grades 10, 11, and 12

Course Number 754

One Semester

This course is intended for students who desire to continue their study of the fine arts and the principles of design that govern the visual arts. Students build on disciplines studied and developed in Principles of Design 1: drawing, painting, sculpture, and printmaking. They are introduced to digital media applications and create art using computer programs. Students are introduced to new concepts and hone proficiency in these major art forms. Students develop thinking skills necessary to envision creative solutions to problems, which can then be applied in other disciplines of study.

Media employed include sculptural and collage materials, mixed media, watercolor paints, pen and ink, charcoal, and digital media computer programs. The \$125 semester fee for art supplies will be added to the tuition bill.

Prerequisite: Principles of Design 1 in a previous school year and teacher approval.

Foundations in Digital Design 1

Offered to Grades 9, 10, 11, and 12

Course Number 758

One Semester

Foundations in Digital Design introduces basic design concepts and how these art elements and design principles are applied to the digital world of visual communication. Instruction covers fundamental design principles and basic skills through hands-on use of select Adobe software applications, school computers, and scanners. To gain a comprehensive understanding of course content, students participate in a variety of activities including layout creation and graphic design projects, weekly critiques, and assessments covering key concepts and terminology. Students refine and apply problem-solving skills as they put practical technical knowledge into action through completion of aesthetic and effective digital design projects with real life applications. Assessed activities include both class work and home work.

Digital assignments need to be completed during class to enable students to receive feedback on their progress. Students are expected to manage their time in order to complete assignments, discussions, and projects by their respective due dates.

There are no prerequisites. This course does not require any prior art experience or teacher approval. The \$65 fee for supplies will be added to the tuition bill.

Foundations in Digital Design 2

Offered to Grades 10, 11, and 12

Course Number 759

One Semester

Foundations in Digital Design II builds upon the fundamental design concepts covered in Foundations in Digital Design I and how they are applied to the world of digital visual communication. Digital Design II offers a general introduction to time-based media artworks through hands-on use of select Adobe software applications, school computers, and student iPads.

To gain a comprehensive understanding of course content, students participate in a variety of screen-based projects including video documentaries and simple animation. Course emphasis is on problem-solving skills as students put practical technical knowledge and independent thinking into action through creation of aesthetic and effective time-based projects with real life applications. Assessed activities include class work, homework, quizzes covering key concepts and terminology and in group critique participation. Students are expected to manage their time to complete sketchbook plans and story boards as well as projects by their respective due dates. Digital assignment work needs to be completed during class to enable students to receive feedback on their progress.

Prerequisite: Foundations in Digital Design I. This course does not require any prior art experience or teacher approval. Supply fee of \$65 fee will be added to the tuition bill.

Music Department

REQUIRED COURSE

Music 9

Non-credit, required in Grade 9

Course Number 953

One Semester, one day per cycle

This freshman class introduces music reading, terminology, structures and elements through class projects and by listening, singing and playing selected songs and pieces on hand-bells and ukulele. The class will also read about, listen to, and discuss music of various styles and cultures.

ELECTIVE COURSES

Music Major 1A

Offered to Grades 10, 11, and 12

Course Number 821

Year

By means of guided listening, score analysis, and model composition, students learn about the development of musical forms and styles from every era of Western Music History. Because the course is based in model composition, students develop a thorough understanding of music history and theory as well as how to use music software, Midi and the Noteflight systems, for composition. Ear-training, piano skills, and vocal technique round out the curriculum.

Prerequisite: some knowledge of music fundamentals through formal study of music or voice. Keyboard background is strongly recommended.

Music Major 2A

Offered to Grades 11 and 12

Course Number 831

Year

This course assumes the aural skills learned in Music 1A and continues to develop the student's understanding of basic and advanced theory of ear training as well as harmonic score analysis. The second year music major is also given an opportunity to explore the historical, social, and artistic influences that have contributed to the development of western music from Baroque through the Romantic Periods. Students continue learning notation skills with Finale and other music software.

Prerequisites: completion of Music 1A or by permission of the teacher

Music Major 3A

Offered to Grade 12

Course Number 841

Year

This course continues to expand aural and analytic skills learned in Music 1A and 2A, stressing rules of harmony as they apply to both analyzed scores and practical compositions. The study of music history continues as in Music 2A and explores the Classic, late Romantic, and contemporary periods. Students continue basic composition and also apply their knowledge by using music software.

Prerequisites: above average comprehension in Music 2A and teacher recommendation.

Choral Music

0.5 credit per year

Offered to Grades 10, 11, and 12

Course Number 802

Year

This course is open to students who have been members of the general glee club for at least one semester and have been accepted into Merion Mercy Singers by audition. The grade for this course is **not** included in the calculation of a student's GPA.

Requirements:

- Two and a half hours of rehearsal per week.
- Performance in concerts and other required choral activities.

Applied Music

0.5 credit per year

Offered to Grades 10, 11, and 12

Course Number 804

Year

This course is open to students who study instruments or voice on a private basis. The grade for this course is **not** included in the calculation of a student's GPA.

Requirements:

- The student must be studying and perform at an intermediate or advanced level.
- Lessons must span the entire school year and be at least one hour per week in duration.
- The private instructor must be a member of the MMA staff or one approved by the department.
- The student must receive an evaluation from the primary instructor that will be factored into the overall grade determined by the music director.
- Student must participate as a soloist in at least one of the major music events in the department, i.e. Christmas concert, Performing Arts Festival, master class or music recital.
- In the case of pianists, the student will be expected to accompany (based on ability) one of the larger ensembles, i.e. Glee Club, Chorale, Ensemble, MMT, and/or chamber music.

All students on music scholarship are required to be enrolled in the applied music course.

Acting

Offered to Grades 9, 10, 11, 12

Course Number 807

One Semester

This course will offer an overview of various vocal and physical techniques for powerful acting. Best practices in public speaking will also be studied. Over the course of the semester students will prepare and perform monologues and scenes. The final project of the semester will culminate in a classroom production that the students will write, direct, stage, and perform.

Musical Theater/Opera

Offered to Grades 10, 11, 12

Course Number 808

One Semester

Over the course of this one-semester class, students will compose and write either a musical or an opera based on a piece of literature. Students will work collaboratively to story-board the scenes, problem-solve the directorial elements, write the dialogue and libretto, and compose and notate the music of their character, using Midi and Noteflight software. The semester will culminate with a classroom performance of their original musical or opera.

Health and Physical Education

Health

Course Numbers 923, 926, and 929

These courses are required for all ninth and tenth grade students. Ninth graders meet a few days per cycle in both semesters; tenth graders meet two days per cycle for one semester. The focus for the classes is the discussion of critical issues and current problems facing teenagers today. Subject areas to be covered can include nutrition, eating disorders, fitness, safety and first aid, AIDS, STDs, teenage pregnancy, drugs, alcohol, mental health, and stress. The students are taught the facts, how these problems may affect them, how to help each other, and where they can go for help.

Physical Education

Course Numbers 921 and 922

These courses are required for all ninth and tenth grade students. Classes meet a few days per cycle in a semester (10th grade) or a few days per cycle for the year (9th grade). The goals of the courses are to enable students to improve their level of fitness, to apply these skills to their lifestyles, to learn basic skills of sports and games, and to gain confidence in their athletic abilities. The importance of teamwork, sportsmanship, and leadership is stressed through each activity.

Online Courses

AP[®] courses offered through Apex Learning or other online providers include the ones listed below. Cost is approximately \$350 per semester (subject to increase). Students taking an AP[®] level course are required to take the AP[®] exam in the spring. The \$95 AP[®] exam fee will be added to the tuition bill.

One semester courses: **AP[®] Macroeconomics, AP[®] Microeconomics, AP[®] Psychology**; full year courses: **AP[®] World History, AP[®] Human Geography, AP[®] Physics 1, AP[®] Computer Science A.**

Refer to the language department section (page 31) for descriptions of **Mandarin Chinese**.

Introduction to Computer Science is offered through Edhesive. The cost in 2017 - 2018 was \$85 for each semester. See page 14 of this publication for more information.

AP[®] Computer Science A is offered through Edhesive. See https://edhesive.com/courses/apcs_java for information. Students will learn to design and implement computer programs that solve problems relevant to today's society, including art, media, and engineering. AP Computer Science A teaches object-oriented programming using the Java language and is meant to be the equivalent of a first semester, college-level course in computer science. It will emphasize problem solving and algorithm development, and use hands-on experiences and examples so that students can apply programming tools and solve complex problems.

Students who are interested in other online courses should, consult the Apex Learning catalog <https://www.apexlearning.com/digital-curriculum/courses/catalog> or those of other online providers. Students must receive permission from the Assistant Head of School for Academic Affairs to enroll in any online course. **Parents are responsible to pay all tuition, books, and other fees associates with online courses.**

Summer Courses

Refer to the separate brochure listing summer school electives. Students must receive permission from the Assistant Head of School for Academic Affairs and/or their teachers to enroll in summer classes.