



MALDEN CATHOLIC

School for Girls

**COURSE CATALOG
2019 - 2020**

GENERAL INFORMATION

COURSE SCHEDULING PROCESS

- January 2019
 - Students Receive Course Selection information in small group meetings with school counselor.
- February-March 2019
 - School Counselor meets individually to select courses/verify the course mapping track. School Counselor will import courses into Rediker and verify any special requests with teachers. Parent will also be notified through Naviance or Lancer Ledger of the proposed schedule.
 - Administration will create schedules for distribution. Schedules will not have teacher assignments or period allocations but will have course numbers so parents can begin ordering books as soon as they are available.
- June 2019
 - Final Reports Cards are emailed to Parents. Any course adjustments are made if grade issues arise or parent/students wish to move classes. Final schedules with teacher names and room numbers are given to students at Fall orientation.
- July 2019
 - Malden Catholic's Online Bookstore will be accessible by the third week of July.
 - Students will be able to access their personalized booklist via LancerLink once the Online Bookstore is open.

WHOM TO CONTACT – COURSE REQUEST QUESTIONS

Inquiries about placement should be discussed initially with the current teacher, next with the school counselor, then Department Chairs and finally with School Principal.

Girls School Counselor – Ms. Kelly Simone simonek@maldencatholic.org

Girls School Counselor – Mr. Matthew Lee-Masiello leemasiellom@maldencatholic.org

Counseling Director – Ms. Caitlyn Oates oatesc@maldencatholic.org

English Department Chair – Ms. Angela Lee leea@maldencatholic.org

Foreign Language Department Chair – Ms. Maria Crotty crottym@maldencatholic.org

STEM Department Chair – Dr. Diane Perito peritod@maldencatholic.org

Social Studies Department Chair – Mr. Timothy Endicott endicottt@maldencatholic.org

Theology Department Chair – Mr. Dustin Batista batistad@maldencatholic.org

School Principal – Ms. Lisa Cenca cencal@maldencatholic.org

COURSE REQUIREMENTS

Students must earn at least the minimum credits listed here during their four years:

Department	Credit Earned
Theology.....	4.0
English.....	4.0
Mathematics.....	4.0
Social Studies.....	3.0
Science.....	3.0 (1.0 Biology, 1.0 Chemistry are required)
Foreign Language.....	2.0 (.5 Introduction to Latin is required)
Arts.....	1.0
Wellness.....	1.0 (May be satisfied with 4 seasons of team participation)
Leadership.....	1.0
Electives.....	5.0-7.0 (AP variation – see below)

Yearly Course Requirements: During a student's four years at Malden Catholic School for Girls, a student must fulfill the following course requirements:

Seniors: Register for 7.0 credits (6.0 for seniors taking 3 or more A.P. courses)

Juniors: Register for 7.0 credits (6.0 for juniors taking 3 or more A.P. courses)

Sophomores: Register for 7.0 credits

Freshman: Register for 7.0 credits

Wellness and Leadership credits are not included in consideration of Honor Roll, cumulative average, nor National Honor eligibility.

All first-year arts elective courses, as well as all physical education courses will be graded on a Pass/Fail (P/F) basis. Upper level arts electives will have a grade assigned. Leadership courses are graded based on participation.

Administrators will also review the academic and disciplinary records of students with two failing grades to consider whether such students should continue in the program at Malden Catholic.

To graduate, seniors must pass all subjects including electives, regardless of the number of credits, and fulfill all other obligations to the school. If a student has failures, before returning to Malden Catholic in the fall, the student must make up all failed courses in an approved summer school or tutoring program. These students will be on academic probation upon their return to Malden Catholic. Students who have failing grades and who show insufficient effort and progress during the school year may be asked to withdraw at any time.

To satisfy the Wellness requirement, teams may be athletic or arts-based. In order to receive credit for participation in a team, the student's name must be listed on the team roster at the end of the season and must have the coaches signature verifying full participation in the team. If a student quits a team or is removed from a team due to grade

ineligibility or discipline issues, the student will not receive credit for participation regardless of the length of time she played during the season. This rule will be strictly enforced. However, if the student is injured during the season, and remains part of the team in a supportive role, she will be given credit. Final credit approval in cases where there is dispute will be made by the principal with the assistance of the athletic director and the coach or moderator. Each season of participation will be worth .25 credit of wellness. Four seasons will be equal to 1.0 full credit.

LEVELS OF INSTRUCTION

Every effort is made to provide students with courses commensurate with their ability, intelligence, and record of achievement. Accordingly, students, rather than be limited to a single track, may be enrolled in courses with varying levels of difficulty, as follows:

a. Advanced Placement

College-level courses prescribed and audited by The College Board, following College Board-approved curriculum, and requiring an AP Test, taken in place of final examination. Test fee is billed mid-year, separately from tuition.

b. Honors

Typically for students whose Entrance Test profiles range from the 70th percentile upward and who, as upperclassmen, have demonstrated superior performance. Honors courses presume essential skills mastery and move at a faster pace and with greater depth than a CP course. If an A.P. is offered – it will be the honors placement.

c. College Preparatory

For students whose Entrance Test profiles range from the 69th percentile downward. College Preparatory courses teach fundamental understandings required for college success. Some courses do not distinguish levels such as Theology and introductory arts-based electives.

Note: A student wishing to move to a higher level at the end of the year should have a minimum average of 93% in her current level and department approval. Students not maintaining a 78% average in a given course may be placed in a lower section.

COURSE/LEVEL CHANGES

The Principal oversees academic issues for students. The Principal governs scheduling for students in consultation with school counseling and teachers. The Principal makes every effort to provide a schedule that meets the student's needs; however, should the occasion arise to review a schedule, the process is as follows:

A. Student- Initiated

1. Student approaches teacher with her concerns.
2. Teachers discusses student's perception that a change is necessary, asking to what extent the student has employed the ordinary tactics available for good performance, e.g., proper study time, good study habits, use of extra help.
3. Teacher asks student to see her school counselor who will navigate the remaining process with administration and parents.
4. The Principal becomes involved should there be any issue of concern.

B. Parent-Initiated

1. Parent contacts teacher about concerns.
2. Teacher discusses student's performance and extent to which the student has employed the ordinary tactics recommended for good performance, e.g. proper study time, good study habits, the use of extra help. If parent approaches the Principal, parent is referred to the teacher for preliminary discussion.

3. Parent wishing to continue the process asks the student to see the school counselor and the process continues as outlined in numbers 3-4 above (Student-Initiated).

Note: Course changes after the start of the year are an exception. Dislike of a teacher or of teaching techniques is not sufficient reason for a change of class. Requests for a particular teacher cannot be honored.

MARKING SYSTEM

Underclassmen in full-year non-Advanced Placement courses receive grades for four quarters and a final exam; each of the four quarters is worth 22.5% of the year's grade and the final exam is worth 10%. All first semester courses for underclassmen and seniors have two marking periods, each worth 50% and no final exam. Underclassmen in second semester courses are graded in two marking periods, each worth 40% and a final exam or final project worth 20%. Seniors are graded on four marking periods, Quarters 1, 2, and 3 each worth 30% and Quarter 4 worth 10%. All Advanced Placement students will be required to take AP examinations. Therefore, AP students will not sit for final exams in those classes where AP credit is granted. Seniors in full-year non-Advanced Placement courses receive grades for four quarters and a final exam. Quarters 1, 2 and 3 are each worth 25%, Quarter 4 is worth 15% and a final exam worth 10%. Seniors in second semester courses are graded on two marking periods. Quarter 3 is worth 60% and Quarter 4 is worth 40%. A final comprehensive assessment and/or final project will be included as part of the Quarter 4 grade. Seniors will have exemption from a final exam in a course in which they receive a grade of 85% or higher.

The following should be used as an interpretive guide for teachers and students:

100-95.....	Outstanding
94-90.....	Excellent
89-85.....	Superior
84-80.....	Good
79-75.....	Average
74-70.....	Unsatisfactory
Below 70.....	Failing

Department	Course # & Description	Level (see pg 4)	Prerequisites	Credit Hours	Course Length	Grade Level			
						9	10	11	12
Theology	2151 Philosophy	Hon	—	0.5	Semester				X
Foreign Language	2331 Spanish 3	Hon	Yes	1.0	Full Year			X	X
	2333 Spanish 3	CP	Yes	1.0	Full Year			X	X
	2334 Latin 3	Hon	Yes	1.0	Full Year			X	X
	2340 AP Spanish Language & Culture	AP	Yes	1.0	Full Year				X
	2350 AP Latin	AP	Yes	1.0	Full Year				X
Social Studies	2450 AP U.S. Government & Politics	AP	Yes	1.0	Full Year				X
	2453 U.S. Government & Current Issues	CP	Yes	0.5	Semester				X
	2455 Native American Studies	CP	Yes	0.5	Semester				X
Arts	2501 Drama 1	-	-	0.5	Semester	X			
	2511 Drama 2: The Musical	Hon	Yes	1.0	Full Year		X	X	X
	2502 Speech & Debate 1	-	-	0.5	Semester	X			
	2512 Speech & Debate 2	Hon	Yes	0.5	Semester		X	X	X
	2503 Introduction to Dance	-	-	0.5	Semester	X			
	2513 Jazz Dance	Hon	Yes	0.5	Semester		X	X	X
	2514 Contemporary Dance	Hon	Yes	0.5	Semester		X	X	X
	2541 Studio Art 1	-	-	0.5	Semester	X			
	2542 Studio Art 2	Hon	Yes	0.5	Semester		X	X	X
	2551 Digital Art 1	Hon	-	0.5	Semester		X	X	X
	2581 Choir 1	-	-	1.0	Full Year	X			
	2582 Advanced Choir	Hon	Yes	1.0	Full Year		X	X	X
Science	2640 AP Chemistry	AP	Yes	1.0	Full Year				X
	2650 AP Physics 1	AP	Yes	1.0	Full Year				X
	2653 Physics 1	CP	Yes	1.0	Full Year				X
	2671 Anatomy & Physiology	Hon	Yes	1.0	Full Year				X
	2620 AP Biology	AP	Yes	1.0	Full Year				X
	2672 Zoology	Hon	Yes	1.0	Full Year				X
Technology & Engineering	2721 Web Design	Hon	Yes	0.5	Semester		X	X	X
	2722 Java Programming	Hon	Yes	0.5	Semester		X	X	X
	2731 PLTW 1: Intro to Engineering	Hon	Yes	1.0	Full Year		X	X	X
	2732 PLTW 2: Principles of Engineering	Hon	Yes	1.0	Full Year			X	X
	2733 PLTW 3: Env. Sustainability Engineering	Hon	Yes	1.0	Full Year				X

Wellness	2901 Yoga	-	-	0.5	Semester		X	X	X
Physical Education	2903 Physical Education	-	-	0.5	Semester			X	X

LEADERSHIP

REQUIRED COURSES

All students are required to take four years (1 credit) of Leadership courses to meet their graduation requirements.

FRESHMAN YEAR

2011 LEADERSHIP 1

0.25 Credit

Prerequisites: None.

This course will work to help students develop a healthy personal image. Students will have the opportunity to discuss issues that impact girls. The course will be designed to build strong independent thinkers and future leaders in our community with a true sense of ethics and conviction.

SOPHOMORE YEAR

2021 LEADERSHIP 2

0.25 Credit

Prerequisites: None.

This course will work to help students develop a healthy personal image. Students will have the opportunity to discuss issues that impact girls. The course will be designed to build strong independent thinkers and future leaders in our community with a true sense of ethics and conviction.

JUNIOR YEAR

2031 LEADERSHIP 3

0.25 Credit

Prerequisites: None.

This course will work to help students develop a healthy personal image. Students will have the opportunity to discuss issues that impact girls. The course will be designed to build strong independent thinkers and future leaders in our community with a true sense of ethics and conviction.

SENIOR YEAR

Prerequisites: None.

2041 LEADERSHIP 4

0.25 Credit

This course will work to help students develop a healthy personal image. Students will have the opportunity to discuss issues that impact girls. The course will be designed to build strong independent thinkers and future leaders in our community with a true sense of ethics and conviction.

Theology

REQUIRED COURSES

All students are required to take four years (4 credits) of required Theology courses to meet their graduation requirements.

FRESHMAN YEAR

2113 THEOLOGY 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

Students will be given a general knowledge and appreciation of Sacred Scripture. They will be introduced to key figures, events, vocabulary, and doctrine in a study of both the Old and New Testament.

SOPHOMORE YEAR

2122 THEOLOGY 2

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement. Successful completion of Theology 1 (2113).

This course reveals the sacraments as the definitive way that Jesus remains present to the Church and the world today. Students will explore concrete ways to understand the sacraments, participate in their rites, and benefit from their graces. This course is constructed around key definitions that help students to formulate an understanding of ecclesiology. Each definition has a historical component that traces its meaning through major periods of Church history, helping students understand how the Church reflects the light of Christ today.

JUNIOR YEAR

2132 THEOLOGY 3

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement. Successful completion of Theology 2 (2122).

This course introduces to students the Church's rich body of social teaching that comes to us from the essential writings of the popes, highlighting the works from Pope Leo XIII onward while exploring how societies work. An overarching theme of the text is a discussion of the foundational values that ought to govern a just society. This course focuses on the essential message of Christ's moral teaching and the importance of love of God and neighbor. Students will study nine essential steps for living a Christian moral life in the Catholic tradition.

SENIOR YEAR

2145 THEOLOGY 4: WORLD RELIGIONS

College Preparatory, 1.0 Credit

Prerequisites: Faculty approval. Successful completion of Theology 3 (2132).

This course allows students to build on their understanding and experience of the Catholic Christian faith by studying different religious traditions. The course includes a study of Judaism, Islam, Hinduism, Buddhism, Confucianism, Shintoism, Taoism as well as a focus on Protestant traditions. It helps develop an understanding of these different faiths with a view towards elaborating on Christian faith and comparing the similarities and differences that exist within each faith tradition.

THEOLOGY

REQUIRED COURSES

SENIOR YEAR [CONTINUED]

2146 THEOLOGY 4: CHRISTIAN SPIRITUALITY**College Preparatory, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Theology 3 (2132).

The purpose of this course is to explore vocations with an invitation to each student to explore her spiritual life. We will place a particular emphasis on the study of Theodore James Ryken, the Xaverian Brothers, Associates, Collaborators and other holy men and women. It will emphasize the various vocations spiritual practices, personal development. The course looks in a particular way at the call to discipleship as exhibited by the Xaverian Brothers now and in the past. We will explore this subject through group discussions, projects, prayer and journaling so that students are able to better recognize and develop their own spiritual journey.

2147 THEOLOGY 4: WOMEN IN CHRISTIAN TRADITION**College Preparatory, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Theology 3 (2132).

Examines the experience of women in the Christian Communions of the past and provides a Scriptural and theological background needed for a better understanding of the place of women in the Christian Communions and in society today.

ELECTIVES

OPEN TO SENIORS ONLY

2151 PHILOSOPHY**Honors, 0.5 Credit**

Prerequisites: Faculty approval. Enrolled in Theology 4 (2145, 2146 or 2147).

This course will explore more than 100 big ideas on topics as diverse as the nature of existence, knowledge, ethics, politics, language, and religion. We will journey through the history of philosophy, from the influential ideas of ancient Greece and Asia to modern concepts voiced by today's brightest thinkers.

****Does not meet Theology Senior Requirement****

ENGLISH

REQUIRED COURSES

All students are required to take four years (4 credits) of required English courses to meet their graduation requirements.

FRESHMAN YEAR

2212 ENGLISH 1: LITERATURE & WRITING

Honors, 1.0 Credit

Prerequisites: Administrative placement.

This first-year writing course prepares students to develop as writers through extensive practice in process strategies, argumentation, and research methods. Students will learn and apply rhetorical strategies to write effectively in print and electronic environments for a variety of audiences, and will learn to think, read, and write critically about significant issues in multiple contexts. Grammar study will be included in this course.

An integrated English course based in the study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

2214 ENGLISH 1: LITERATURE & WRITING

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

This first-year writing course prepares students to develop as writers through extensive practice in process strategies, argumentation, and research methods. Students will learn and apply rhetorical strategies to write effectively in print and electronic environments for a variety of audiences, and will learn to think, read, and write critically about significant issues in multiple contexts. Grammar study will be included in this course.

.An integrated English course based in the study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 9 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH

REQUIRED COURSES

SOPHOMORE YEAR

2221 ENGLISH 2: LITERATURE & WRITING**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of English 1 Honors (2212).

This second year will focus on deepening writing principles and begin the research writing process. This writing course prepares students to develop as writers through extensive practice in process strategies, argumentation, and research methods. Students will learn and apply rhetorical strategies to write effectively in print and electronic environments for a variety of audiences, and will learn to think, read, and write critically about significant issues in multiple contexts. Grammar study will be included in this course.

An integrated English course based in the study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

2223 ENGLISH 2: LITERATURE & WRITING**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of English 1 CP (2214).

This second year will focus on deepening writing principles and begin the research writing process. This writing course prepares students to develop as writers through extensive practice in process strategies, argumentation, and research methods. Students will learn and apply rhetorical strategies to write effectively in print and electronic environments for a variety of audiences, and will learn to think, read, and write critically about significant issues in multiple contexts. Grammar study will be included in this course.

An integrated English course based in the study of language, literature, composition, and oral communication with a focus on exploring a wide-variety of genres and their elements. Students use literary interpretation, analysis, comparisons, and evaluation to read and respond to representative works of historical or cultural significance appropriate for Grade 10 in classic and contemporary literature balanced with nonfiction. Students write responses to literature, expository and argumentative/persuasive compositions and research reports. Students deliver grade-appropriate oral presentations and access, analyze, and evaluate online information.

ENGLISH

REQUIRED COURSES

JUNIOR YEAR

2230 AP ENGLISH LANGUAGE & COMPOSITION**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of English 2 Honors (2221).

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. Students taking an Advanced Placement course are required to take the AP Exam in May.

2233 ENGLISH 3**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of English 2 CP (2223).

This course is designed for students with the consistently motivated diligence to achieve. It covers a chronological approach to American Literature from 1650 to the present, the study of vocabulary, grammar drills, work with SAT preparation, analysis of outside reading selections, and further development of writing skills. The student is also expected to engage in in-depth discussion, to present material in public speaking format and to complete an MLA documented research paper. The course employs the use of critical thinking in its methods.

SENIOR YEAR

2240 AP ENGLISH LITERATURE & COMPOSITION**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of AP English Language & Composition (2230).

The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the way writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Students taking an Advanced Placement course are required to take the AP Exam in May.

2243 ENGLISH 4**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of English 3 CP (2233).

The English 4 Course is designed for the advanced student who is capable of a rigorous course in both literature and composition based on a survey of the chronology of English literature, supplemented by historical and cultural input. Students are expected to attain a high degree of proficiency in reading and writing. The class studies selections from the four main literary genres as a means of preparation for success in all phases of a college English course, including literary analysis, written composition, and class discussion. Students are required to write at least one well-documented research paper.

FOREIGN LANGUAGE

REQUIRED COURSES

All students are required to take two years (2 credits) of required Foreign Language courses to meet their graduation requirements. All freshmen are required to take Introduction to Latin (2301) during their 1st Semester.

FRESHMAN YEAR

2301 INTRODUCTION TO LATIN (1ST Semester)

Honors, 0.5 Credit

Prerequisites: Administrative placement.

This course introduces students to the basics of Latin grammar, syntax, and vocabulary with the goal of empowering them to read and comprehend (modified) Latin texts that broadly survey Ancient Roman history, philosophy, and culture. Students are required to complete a variety of language tasks including translation both into and from Latin and answer comprehension questions on Latin passages. Ultimately, this course develops students' ability to identify and analyze fundamental grammatical constructions while improving their vocabulary and comprehension skills, both within the target language, as well as in English. The honors level will involve additional outside reading and writing.

2303 INTRODUCTION TO LATIN (1ST Semester)

College Preparatory, 0.5 Credit

Prerequisites: Administrative placement.

This course introduces students to the basics of Latin grammar, syntax, and vocabulary with the goal of empowering them to read and comprehend (modified) Latin texts that broadly survey Ancient Roman history, philosophy, and culture. Students are required to complete a variety of language tasks including translation both into and from Latin and answer comprehension questions on Latin passages. Ultimately, this course develops students' ability to identify and analyze fundamental grammatical constructions while improving their vocabulary and comprehension skills, both within the target language, as well as in English. The honors level will involve additional outside reading and writing.

2311 SPANISH 1 (2ND Semester)

Honors, 0.5 Credit

Prerequisites: Administrative placement.

This level of Spanish introduces very basic grammatical structure, vocabulary, and verb forms at an appropriate pace for the students. Teachers provide numerous language drills along with additional reinforcements such as regular worksheets and constant oral review. Readings from the text acquaint students with Spanish culture.

2313 SPANISH 1 (2ND Semester)

College Preparatory, 0.5 Credit

Prerequisites: Administrative placement.

This level of Spanish introduces very basic grammatical structure, vocabulary, and verb forms at an appropriate pace for the students. Teachers provide numerous language drills along with additional reinforcements such as regular worksheets and constant oral review. Readings from the text acquaint students with Spanish culture.

2314 LATIN 1 (2ND Semester)

Honors, 0.5 Credit

Prerequisites: Administrative placement. Successful completion of Introduction to Latin Honors (2301).

This course provides an introduction to the Latin language with an emphasis on basic reading. Much effort is made to strengthen both the students' grammatical and vocabulary ability. The basic Latin sentence form is taught. Daily assignments and quizzes are an integral part of the course.

FOREIGN LANGUAGE

REQUIRED COURSES

SOPHOMORE YEAR

2321 SPANISH 2**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Spanish 1 Honors (2311).

This second-year Spanish class stresses oral communication and the essentials of Spanish grammar. Emphasis is placed on the study of regular and irregular verbs in the indicative mood. The course introduces many important cultural aspects of the Hispanic world through various reading selections, audio materials, videos and the continued use of the target language by the instructor, which will expand the student's communicative abilities. This course is also offered at the honors level which will emphasize fast paced oral communication and a more in-depth study of the language.

2323 SPANISH 2**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Spanish 1 CP (2313).

This second-year Spanish class stresses oral communication and the essentials of Spanish grammar. Emphasis is placed on the study of regular and irregular verbs in the indicative mood. The course introduces many important cultural aspects of the Hispanic world through various reading selections, audio materials, videos and the continued use of the target language by the instructor, which will expand the student's communicative abilities. This course is also offered at the honors level which will emphasize fast paced oral communication and a more in-depth study of the language.

2324 LATIN 2**Honors, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Latin 1 Honors (2314).

This course will continue the study of the Latin language with an emphasis on vocabulary and grammatical structures and their application to English. Our reading will focus on Medieval and early modern Latin, concluding with the unadapted text of Nepos' Life of Atticus., Daily assignments and quizzes are an integral part of the course.

FOREIGN LANGUAGE

ELECTIVES

OPEN TO JUNIORS AND SENIORS

2331 SPANISH 3**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Spanish 2 Honors (2321).

The college preparatory level of Spanish 3 begins with a review of the grammatical structures and verb forms introduced in Spanish 3 at a pace appropriate to the students. Additionally, students learn new structures, vocabulary and verb forms as they further strengthen their listening comprehension and speaking skills. Teachers provide constant review and steady reinforcement through written and oral practice. This course is also offered at the honors level which will stress oral communication, grammar, literature and composition at a more intense pace as well as a more in-depth study of the language.

2333 SPANISH 3**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Spanish 2 CP (2323).

The college preparatory level of Spanish 3 begins with a review of the grammatical structures and verb forms introduced in Spanish 3 at a pace appropriate to the students. Additionally, students learn new structures, vocabulary and verb forms as they further strengthen their listening comprehension and speaking skills. Teachers provide constant review and steady reinforcement through written and oral practice. This course is also offered at the honors level which will stress oral communication, grammar, literature and composition at a more intense pace as well as a more in-depth study of the language.

2334 LATIN 3**Honors, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Latin 2 Honors (2324).

This course will begin with an intensive review of all grammatical constructs from the first two years and will continue with a chronological survey of Latin authors including Caesar, Catullus, Cicero, Ovid, Vergil, Horace, Ovid & Erasmus, covering the various genres of History, Commentary, Elegy, Epiz, Law, Philosophy, Satire and Biography.

FOREIGN LANGUAGE

ELECTIVES

OPEN TO SENIORS ONLY

2340 AP SPANISH LANGUAGE & CULTURE

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 3 Honors (2331) with a grade of 90 or above, work of superior quality, recommendation of Spanish 3 teacher.

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). Students taking an Advanced Placement course are required to take the AP Exam in May.

2350 AP LATIN

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Latin 3 Honors (2334) and sufficient enrollment.

The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. The course requires students to prepare and translate the readings and place these texts in a meaningful context, which helps develop critical, historical, and literary sensitivities. Throughout the course, students consider themes in the context of ancient literature and bring these works to life through classroom discussions, debates, and presentations. Additional English readings from both of these works help place the Latin readings in a significant context. Students taking an Advanced Placement course are required to take the AP Exam in May.

SOCIAL STUDIES

REQUIRED COURSES

All students are required to take three years (3 credits) of required Social Studies courses to meet their graduation requirements.

FRESHMAN YEAR

2410 AP WORLD HISTORY

Advanced Placement, 1.0 Credit

Prerequisites: Administrative placement. 70 or higher in Reading on the HSPT and proficiency scores on entry level testing.

This course is designed to be the equivalent of a two-semester introductory college or university world history course. In AP World History students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course provides five themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.

2413 WORLD HISTORY 1: ANCIENT TO PRE-MODERN

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

Intro to World History is designed to provide students with knowledge and understanding of the history, way of life and important issues facing the great civilizations from the dawn of humankind through to the Industrial Revolution. The main questions of this course will be what leads to the rise and development of civilization and what leads to the downfall of civilizations. The course will follow historical, social, religious, economic and geographic developments of the world prior to the Modern Era. Students will look at a variety of the great civilizations including the Egyptians, Mesopotamians, Greeks, Romans, Chinese Dynasties, Muslim empires and European monarchies. The course is also designed to develop critical thinking abilities, and requires primary and secondary source analysis, critical reading, critical writing, and research utilizing an abundance of technological resources.

SOCIAL STUDIES

REQUIRED COURSES

SOPHOMORE YEAR

2420 AP EUROPEAN HISTORY**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of AP World History (2410).

AP European History is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing historical evidence; contextualization; comparison; causation; change and continuity over time; and argument development. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. Students taking an Advanced Placement course are required to take the AP Exam in May.

2423 WORLD HISTORY 2: MODERN TO CURRENT**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of World History 1 CP (2413).

Modern World History and Current Events is designed to provide students with knowledge and understanding of the history and important issues that have occurred in the world over the past 250 years. The course will follow the historical, social, religious, economic and geographic developments of the world in the Modern Era. Key events that will be analyzed include the Russian Revolution, Rise of Communism, World War I, World War II, the Cold War and Globalization. Special attention will be paid to analyzing how our world today has become so globalized and tracing the roots of our global problems today. This course is designed to develop sequencing and causation skills, helping students understand why the world is the way it is today by looking back over the key events of the past 250 years that shaped and influenced our world.

JUNIOR YEAR

2430 AP U.S. HISTORY**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of AP European History (2420).

AP U.S. History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. Students taking an Advanced Placement course are required to take the AP Exam in May.

SOCIAL STUDIES

REQUIRED COURSES

JUNIOR YEAR [CONTINUED]

2433 U.S. HISTORY**College Preparatory, 1.0 Credit**

Prerequisites: Successful completion of World History 2 (2423) and departmental placement.

U.S. History is a study of United States history from the arrival of the earliest humans in the Americas to the present. The course emphasizes the political, economic, and social developments in the United States. Students will be challenged to develop their reading, writing and critical thinking skills, as well as presentation skills. Areas of emphasis will include the American Revolution, United States Constitution, the Civil War, World War II, the Cold War, as well as the fundamental principles of the American democratic tradition. Students will utilize technology to analyze current events in the United States and trace their causation to their historical roots.

ELECTIVES

SENIOR YEAR

2450 AP U.S. GOVERNMENT & POLITICS**Advanced Placement, 1.0 Credit**

Prerequisites: Successful completion of AP U.S. History (2430) and Faculty approval.

This college-level course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. Students taking an Advanced Placement course are required to take the AP Exam in May.

2453 U.S. GOVERNMENT & CURRENT ISSUES**College Preparatory, 0.5 Credit**

Prerequisites: Successful completion of U.S. History (2440 or 2443) and Faculty approval.

U.S. Government and Current Issues is designed to provide students with knowledge and understanding of our political structures in the United States and how they work towards resolving National and Global Conflicts. There are two main concepts that will be covered in this one semester course. First, Students will gain civic awareness of our political institutions, election cycles, American ideologies and the role citizen play in our government. The second concept is the understanding of Modern-Day Issues and the roots of these issues. We will use 20th Century history to trace back current American Issues such as, Race Relations, U.S. World Relations, U.S. Economic Policy and the emergence of Globalization from U.S. perspective. Throughout the course, the student will be introduced to facts and concepts and encourages to develop an understanding of the reason why the United States and to a lesser degree the World is in its current state. Students will develop their research, writing, speaking and critical thinking skills. In addition, students will develop their skills in reading primary as well as secondary sources.

SOCIAL STUDIES

ELECTIVES

SENIOR YEAR [CONTINUED]

2455 NATIVE AMERICAN STUDIES

College Preparatory, 0.5 Credit

Prerequisites: Successful completion of U.S. History (2440 or 2443) or and Faculty approval.

This course will analyze the history of the “American Indian” from its pre-Columbian roots to the present day. Each native tribe of the Americas is a unique entity, and this course will work to identify the major contributions, historical events, and key figures of many specific groups. The course will briefly study the original native empires of the Americas (Olmec, Moche, Maya, Aztec, Inca) as well as the native tribes of the US in the early years of the English colonies (Wampanoag, Powhattan, Pequot, Seminole, Cherokee, etc.). However, the focus of the course will be the Great Plains and the Lakota Nation, studying both the its history in the region and the modern-day reservation system. This course will utilize primary and secondary sources throughout history and work to evaluate Native American representation in film as a final project.

ARTS

ELECTIVES

All students are required to take one year (1 credits) of required Fine Arts courses during their Freshman year to meet their graduation requirements.

OPEN TO FRESHMAN ONLY

2501 DRAMA 1

Pass/Fail, 0.5 Credit

Prerequisites: None.

An introduction to the nature of theater as a performing art. Students study selected plays from the perspective of actors and directors, and the strategies of playwrights to develop the ability to image the play in performance and to appreciate the range of theater's possibilities.

2502 SPEECH & DEBATE 1

Pass/Fail, 0.5 Credit

Prerequisites: None.

Speech & Debate 1 is a one-semester introductory course that covers a variety of styles of public speaking and formal debate. Through research and practice students will become familiar with these styles through instruction, research, and practice. Each unit will culminate in performance assignments that require students to demonstrate their abilities within the classroom setting. Opportunities to take their knowledge to competition at the local and state level may be made available to students as well through extracurricular programs.

2503 INTRODUCTION TO DANCE

Pass/Fail, 0.5 Credit

Prerequisites: None.

A semester long course touching upon various genres of dance including Ballet, Jazz, Hip Hop, Modern and Contemporary, Lyrical, Social and Line Dance, and Cultural Dance. The course will cover the history of each genre, and various techniques and styles. The students will learn combinations and routines, all to be performed. With the completion of this course, students will gain a sense of familiarity of the major genres of dance being performed today, as well as gain a sense of joy that dance can bring.

2541 STUDIO ART 1

Pass/Fail, 0.5 Credit

Prerequisites: None.

Basic drawing is an acquired skill: you can do it! Studio Art 1 guides students through a developmental series of drawing strategies to help them gain the perceptual skills they need to create drawings from observation. Learning to use a variety of pencils, charcoal, pen and ink, colored pencil, oil crayon, and pastels, students will compile their own drawing portfolio. To those who may later be interested in applying to a school of art or architecture, this portfolio could be a valuable foundation. Students will also learn about art from various periods in history.

2581 CHOIR 1

Pass/Fail, 1.0 Credit

Prerequisites: None.

This is a year-long course that explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. Students in Chorale are expected to participate in one evening concert each quarter as a major part of their grade.

ARTS

ELECTIVES

OPEN TO SOPHOMORES, JUNIORS AND SENIORS

2511 DRAMA 2: THE MUSICAL

Honors, 1.0 Credit

Prerequisites: Faculty approval. Successful completion of Drama 1 (2501) or Choir 1 (2541).

This course is for the student that is interested in Musical Theatre – both on stage and “behind the scenes”. Students will have the opportunity to rehearse, perform, direct, and choreograph/stage various scenes and shows from the Broadway genre. All students are expected to both perform and direct/produce. Performances will be both in-class and “main-stage” productions. Performances are required for all students.

2512 SPEECH & DEBATE 2

Honors, 0.5 Credit

Prerequisites: Faculty approval. Successful completion of Speech & Debate 1 (2511).

Speech & Debate 2 is a one-semester course that covers a variety of styles of public speaking and formal debate. Through research and practice students will become familiar with these styles through instruction, research, and practice. Each unit will culminate in performance assignments that require students to demonstrate their abilities within the classroom setting. Opportunities to take their knowledge to competition at the local and state level may be made available to students as well through extracurricular programs.

2513 JAZZ DANCE

Honors, 0.5 Credit

Prerequisites: Faculty approval. Successful completion of Introduction to Dance (2521).

A semester long course diving deep into the various styles of Jazz Dance in the world today such as Classic Jazz, Musical Theater, Jazz Funk, Video Dance, Hip Hop, and Commercial Dance. This class will dive deep into the history of Jazz Dance and how it has evolved over the years. The course will explore movement styles and teach various pieces to be performed and graded. Students will also prepare projects which combine research presentation and movement. With the completion of this course, students will gain a solid understanding of Jazz Dance styles commonly found performed all over the world today.

2514 CONTEMPORARY DANCE

Honors, 0.5 Credit

Prerequisites: Faculty approval. Successful completion of Introduction to Dance (2521).

A semester long course diving deep into the various styles of Contemporary Dance in the world today such as Contemporary Ballet, Horton, Limon and Graham Modern Techniques, and Ballet. The class will dive deep into the history of Contemporary Dance and how it has evolved over the years. Students will explore various techniques and learn a wide range of pieces to be performed and graded. Students will also prepare projects which combine research presentation and movement. With the completion of this course, students will gain a solid understanding of Contemporary Dance styles commonly found performed all over the world today.

ARTS

ELECTIVES [CONTINUED]

OPEN TO SOPHOMORES, JUNIORS AND SENIORS

2542 STUDIO ART 2

Honors, 0.5 Credit

Prerequisites: Faculty approval. Successful completion of Studio Art 1 (2531).

Basic drawing is an acquired skill: you can do it! Studio Art 2 guides students through a developmental series of drawing strategies to help them gain the perceptual skills they need to create drawings from observation. Learning to use a variety of pencils, charcoal, pen and ink, colored pencil, oil crayon, and pastels, students will compile their own drawing portfolio. To those who may later be interested in applying to a school of art or architecture, this portfolio could be a valuable foundation. Students will also learn about art from various periods in history.

2551 DIGITAL ART 1

Honors, 0.5 Credit

Prerequisites: Faculty approval.

Digital Art 1 teaches fundamentals of photography and digital imaging. Through personal practice, demonstration, lecture, and critique students will learn the basics of color, composition, camera function, and digital editing. Along the way, students will learn a basic vocabulary as it relates to both contemporary and traditional photography. Through daily assignments, students will develop an eye for interesting, strong composition and hone those editing skills that will result in powerful digital images. There will be a Quarterly term project.

2582 ADVANCED CHOIR

Honors, 1.0 Credit

Prerequisites: Faculty approval. Successful completion of Choir 1 (2541) and an audition.

This is a year-long course that explores choral music from a wide variety of cultures and time periods through study and performance. The core curriculum emphasizes the basics of vocal technique, sight-reading, music theory, and music history. Students in Chorale are expected to participate in one evening concert each quarter as a major part of their grade.

SCIENCE

REQUIRED COURSES

All students are required to take three years (3 credits) of required Science courses (1 credit Physics, 1 credit Biology and 1 credit Chemistry) to meet their graduation requirements. **Note: Each science courses offered is considered a laboratory science.**

FRESHMAN YEAR

2610 AP PHYSICS

Advanced Placement, 1.0 Credit

Prerequisites: Administrative placement.

AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students taking an Advanced Placement course are required to take the AP Exam in May.

2613 PHYSICAL SCIENCE 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

Students in high school continue to develop their understanding of the four core ideas in the physical sciences. These ideas include the most fundamental concepts from chemistry and physics but are intended to leave room for expanded study in upper-level high school courses. The high school performance expectations in Physical Science build on the middle school ideas and skills and allow high school students to explain more in-depth phenomena central not only to the physical sciences, but to life and earth and space sciences as well. These performance expectations blend the core ideas with scientific and engineering practices and crosscutting concepts to support students in developing usable knowledge to explain ideas across the science disciplines. In the physical science performance expectations at the high school level, there is a focus on several scientific practices. These include developing and using models, planning and conducting investigations, analyzing and interpreting data, using mathematical and computational thinking, and constructing explanations; and to use these practices to demonstrate understanding of the core ideas. Students are also expected to demonstrate understanding of several engineering practices, including design and evaluation.

SCIENCE

REQUIRED COURSES

SOPHOMORE YEAR

2620 AP BIOLOGY**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Seminar in Physical Science Honors (2601), Computer Science & Engineering Honors (2701).

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions. Students taking an Advanced Placement course are required to take the AP Exam in May.

2623 BIOLOGY 1**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Seminar in Physical Science CP (2603) and Computer Science & Engineering CP (2703).

Biology is the study of life with emphasis on molecular biology. Topics include the structure and function of cells, energy processes necessary for life, ecological principles, DNA, genetics, biotechnology, reproduction, and evolution. Laboratory investigations stress qualitative and quantitative measurement, analysis, and problem solving using the scientific method. Laboratory experiments include the use of microscopes, the study of cells, and a variety of other techniques.

JUNIOR YEAR

2631 CHEMISTRY 1**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of AP Biology (2620) and enrolled in Algebra 2 or higher.

This course provides a rigorous study of chemistry designed to prepare students for advanced level courses—AP Chemistry and advanced college level courses. There will be experiments, mathematical, and theoretical treatment of topics such as chemical terminology, matter and energy, phases of matter, atomic structure and bonding, formulas and equations, solutions, kinetics, equilibrium, acids and bases, and oxidation-reduction. Related laboratory experiments will be performed.

2633 CHEMISTRY 1**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Biology 1 CP (2623).

Chemistry is an experimental, mathematical, and theoretical treatment of the concepts of chemistry. The topics include chemical terminology, matter and energy, phases of matter, atomic structure and bonding, formulas and equations, solutions, kinetics, and equilibrium. The laboratory exercises for the course are closely related to the textbook material.

SCIENCE

ELECTIVES

SENIOR YEAR

2640 AP CHEMISTRY**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Chemistry 1 Honors (2631) with a grade of 90 or above, and successful completion of Pre-Calculus (2831 or 2832).

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. Created by the AP Chemistry Development Committee, the course curriculum is compatible with many Chemistry courses in colleges and universities. Students taking an Advanced Placement course are required to take the AP Exam in May.

2650 AP PHYSICS 1**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Chemistry 1 Honors (2631) with a grade of 90 or above, and successful completion of Algebra 2/Trigonometry Honors (2821).

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students taking an Advanced Placement course are required to take the AP Exam in May.

2653 PHYSICS 1**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Algebra 2 (2824).

A study of mechanics, wave phenomena, electricity, and magnetism, Physics 1652 is intended as a preparation for college-level study in science, but not exclusively for prospective science majors. This course strongly emphasizes the application of mathematical skills and problem solving as it applies to Physics. The pace and depth of coverage are adjusted to meet the needs of the students.

2671 ANATOMY & PHYSIOLOGY**Honors, 1.0 Credit**

Prerequisites: Faculty approval. Acceptance based on academic performance in previous science courses, recommendations of Biology and Chemistry teachers.

This year-long course is designed to give students an understanding of the fundamental and principle concepts of human anatomy and physiology. Topics will begin with an overview of concepts introduced in the Biology 1 course with an emphasis placed on their function in the human body. Later topics will include an in-depth study of cytology, tissues, each major organ system and special senses. Assigned readings from the text, reserved readings, lecture notes, nightly homework, laboratory work and dissection will also be part of this course.

SCIENCE

ELECTIVES

SENIOR YEAR [CONTINUED]

2672 ZOOLOGY**Honors, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Biology 1 Honors (2621) and Chemistry 1 Honors (2631).

Students examine the major mammal categories and study their history and evolution. Instructors go through the physiology and anatomy of different mammal groups, and they demonstrate the techniques professionals use in mammal identification. Class discussions may also address mammal habitats and ecology.

2620 AP BIOLOGY**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Physics, Physical Science.

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes-energy and communication, genetics, information transfer, ecology, and interactions. Students taking an Advanced Placement course are required to take the AP Exam in May.

TECHNOLOGY & ENGINEERING

ELECTIVES

OPEN TO SOPHOMORES, JUNIORS AND SENIORS

2721 WEB DESIGN

Honors, 0.5 Credit

This one semester course will introduce students to the development and maintenance of Web pages using the Hypertext Markup Language and HTML editors. HTML coding and creating Web graphics will be emphasized. Introduction to key Web design concepts and principles. Students will be introduced to a variety of challenging hands on activities.

2722 JAVA PROGRAMMING

Honors, 0.5 Credit

Computer Programming in Java would begin outlining the fundamentals of computer science including a historical look at computers, computer ethics and move into the core principles of programming and problem solving with Java. The course will cover programming basics, data and information processing, object-oriented programming, graphical interfaces, the software development lifecycle, and web-based programming.

2731 PLTW 1: INTRODUCTION TO ENGINEERING

Honors, 1.0 Credit

Prerequisites: Faculty approval. Successful completion of Algebra 1 (2801 or 2803) or Geometry (2811).

Project Lead the Way 1 - Introduction to Engineering Design (IED) is a high school level course that is appropriate for students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills, creative abilities and understanding of the design process. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

The course assumes no previous knowledge, but students should be concurrently enrolled in college preparatory mathematics and science. Students will employ engineering and scientific concepts in the solution of engineering design problems. In addition, students use the most current issued 3D solid modeling design software package to help them design solutions to solve proposed problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

OPEN TO JUNIORS AND SENIORS**2732 PLTW 2: PRINCIPLES OF ENGINEERING****Honors, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of Algebra 2 (2821, 2822 or 2824) or Geometry (2811 or 2813).

Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

OPEN TO SENIORS ONLY**2733 PLTW 3: ENV. SUSTAINABILITY ENGINEERING****Honors, 1.0 Credit**

Prerequisites: Faculty approval. Successful completion of PLTW 2, Principles of Engineering (2732).

In Project Lead the Way 3 - Environmental Sustainability Engineering, students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply, and renewable energy. Applying their knowledge through hands-on activities and simulations, students research and design potential solutions to these true-to-life challenges.

MATH

REQUIRED COURSES

All students are required to take four years (4 credits) of required Math courses to meet their graduation requirements.

ALGEBRA 1

2801 ALGEBRA 1

Honors, 1.0 Credit

Prerequisites: Administrative placement.

Algebra 1 is a study of the fundamentals of algebra including the real number system and its properties, linear equations in one variable, systems of open sentences in two variables, operations on polynomials and rational expressions, factoring, radicals, the solution of quadratic equations, and an introduction to the concepts of function and coordinate geometry. The course also includes the solution of word problems and a review of arithmetic skills.

2803 ALGEBRA 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

Algebra 1 is a study of the fundamentals of algebra including the real number system and its properties, linear equations in one variable, systems of open sentences in two variables, operations on polynomials and rational expressions, factoring, radicals, the solution of quadratic equations, and an introduction to the concepts of function and coordinate geometry. The course also includes the solution of word problems and a review of arithmetic skills.

GEOMETRY

2811 GEOMETRY

Honors, 1.0 Credit

Prerequisites: Administrative placement. Successful completion of Algebra 1, 70 or higher in HSPT, and Math Placement Exam proficiency score.

Honors Geometry is designed for students who show high mathematical aptitude and ability and who meet the mentioned requirements below. The topics outlined in this course include the study of angle relationships, parallel lines, right triangles, quadrilaterals, congruent and similar polygons, circles, constructions and loci, coordinate geometry, the concepts of area and volume, and the study of logic through deductive proof. In addition, this course includes a review of some key Algebra 1 concepts as well as an introduction to Algebra 2. Students will write calculator programs to solve specific problems.

2813 GEOMETRY

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Successful completion of Algebra 1 (2801 or 2803).

Geometry is designed for students who show high mathematical aptitude. The topics outlined in this course include the study of angle relationships, parallel lines, right triangles, quadrilaterals, congruent and similar polygons, circles, constructions and loci, coordinate geometry, the concepts of area and volume, and the study of logic through deductive proof. In addition, this course includes a review of some key Algebra 1 concepts as well as an introduction to Algebra 2. Students will write calculator programs to solve specific problems.

MATH

REQUIRED COURSES

ALGEBRA 2

2821 ALGEBRA 2/TRIGONOMETRY**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Geometry Honors (2811).

This course takes an in-depth look at the notions of functions and relations, systems of equations in two and three variables, operations on polynomials and rational expressions, radicals and irrational numbers, sequences and series, complex numbers and polynomial functions, quadratic equations, exponents, logarithms, analytic geometry, and trigonometry.

2822 INTEGRATED MATH 2**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Algebra 1 Honors (2801).

After an intensive review of the concepts covered in Algebra 1, and at a pace appropriate to the students at each level, this course covers all the topics in Geometry and proceeds to a deeper look at the notions of functions and relations, analytic geometry, logarithms and exponents, and a study of trigonometry in preparation for Pre-Calculus.

2824 ALGEBRA 2**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Algebra 1 (2803) and Geometry (2813).

After an intensive review of the concepts covered in Algebra 1, and at a pace appropriate to the students at each level, this course proceeds to a deeper look at the notions of functions and relations, analytic geometry, logarithms and exponents, sequences and series, and a study of trigonometry.

2828 COLLEGE ALGEBRA**College Preparatory, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Algebra 1 (2803), Geometry (2813), and Algebra 2 (2824).

This is a fourth course option for students who have completed Algebra I, Geometry, and Algebra II, but are still struggling with high school mathematics standards essential for success in first year post-secondary mathematics courses required for non-STEM majors. The course is designed to serve as a bridge for high school students who will enroll in non-STEM post-secondary study and will serve to meet the high school fourth course graduation requirement. The course will meet the needs of college bound seniors who will not pursue STEM fields.

MATH

REQUIRED COURSES

PRE-CALCULUS

2831 PRE-CALCULUS/CALCULUS**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Algebra 2/Trigonometry Honors (2821).

Pre-Calculus/Calculus supplements and extends the Algebra 2/ Trig (Honors) course and evolves into the calculus. Topics covered include elementary algebraic and transcendental functions as well as elements of discrete math. The calculus provides a thorough introduction to the concepts and applications of differential and integral calculus. Students prepare for the advanced placement test in this course by studying the topics suggested in the AP syllabus.

2832 PRE-CALCULUS**Honors, 1.0 Credit**

Prerequisites: Departmental placement. Successful completion of Integrated Math 2 Honors (2822).

A preparation for the study of calculus, this course focuses on the concept of function as exemplified by algebraic, polynomial, logarithmic, exponential, and circular (trigonometric) functions, and by functions of the natural numbers (sequences and mathematical induction). Pre-Calculus includes an extensive coverage of analytic geometry and, if time allows, polar coordinates, conic sections, discrete mathematics, and an introduction to differential calculus.

CALCULUS

2840 AP CALCULUS BC**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Pre-Calculus/Calculus (2831) or Pre-Calculus (2832).

Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. Students taking an Advanced Placement course are required to take the AP Exam in May.

2841 AP CALCULUS AB**Advanced Placement, 1.0 Credit**

Prerequisites: Departmental approval. Successful completion of Pre-Calculus/Calculus (2831) or Pre-Calculus (2832).

AP Calculus AB is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. Students taking an Advanced Placement course are required to take the AP Exam in May.

WELLNESS

ELECTIVES

OPEN TO SOPHOMORES, JUNIORS AND SENIORS

2901 YOGA**Pass/Fail, 0.5 Credit**

Prerequisites: Administrative approval.

Yoga is designed to improve the health, performance, and mental acuity of athletes or individuals interested in improving their level of fitness and decreasing their level of stress.

2903 PHYSICAL EDUCATION**Pass/Fail, 0.5 Credit**

Prerequisites: Administrative approval.

In our Junior-Senior Physical Education elective, students engage in a variety of physical activities that enable them to meet individual health-related and skill-related fitness standards that are challenging and self-directed. Emphasis will be placed on concepts of personal fitness and knowledge to achieve and maintain a healthy level of physical fitness. Students will participate in a variety of sport theme activities that can be used for lifetime recreation and personal fitness. Students will engage in both individual and team activities.