

The Codivisional High School

Course Catalog 2021 - 2022



#### **COURSE SCHEDULING PROCESS**

- The 2021-2022 Course Catalog will be posted on the MC website and emailed to all parents and students.
- School counselors will meet with all students and review the course selection process.
- Faculty will provide their recommendations for required courses and electives.
- Department Chairs will review faculty recommendations and make necessary adjustments.
- School counselors will meet individually with students to review required course recommendations and to discuss and select choices for elective courses.
- School Administration will assess course requests and staffing.
- June 17, 2021 Final Reports Cards are emailed to Parents.
- Following completion of the school year, review of final academic performance, and assessment of class enrollments, final course assignments will be made.
- Final Schedules will be emailed to Parents and Students.
- School on-line Bookstore will open following the emailing of schedules.

# WHOM TO CONTACT - COURSE REQUEST QUESTIONS

Inquiries about placement should be discussed initially with the school counselor.

Students Served	School Counselor	Email
Grade 9 - Girls	Ms. Alexis Cole	colea@maldencatholic.org
Grade 9 - Boys	Br. Dan Cremin, C.F.X.	cremind@maldencatholic.org
Upperclassmen	Mr. Matthew Lee-Masiello	leemasiellom@maldencatholic.org
Upperclassmen	Mrs. Caitlyn Oates (Director)	oatesc@maldencatholic.org
Upperclassmen	Mrs. Donna Parker	parkerd@maldencatholic.org
Department	Chair	Email
English	Mrs. Angela Lee	leea@maldencatholic.org
Foreign Languages	Mrs. Maria Crotty	crottym@maldencatholic.org
Math	Mr. Richard Hickey	hickeyr@maldencatholic.org
Social Studies	Mr. Timothy Endicott	endicottt@maldencatholic.org
Science, Technology & Engineering	, Mrs. Saman Abbas	abbas@maldencatholic.org
Theology	Mr. Dustin Batista.	batistad@maldencatholic.org
Role	Administrator	Email
Boys Division Leade	r Mr. Robert Bucchino	bucchinor@maldencatholic.org
Girls Division Leader	Mr. Jeff Smith	smithj@maldencatholic.org
Principal	Mrs. Rose Maria Redman	redmanr@maldencatholic.org



#### **ACADEMIC REGULATIONS**

The Principal is responsible for the daily administration of the academic program at Malden Catholic. The following regulations are subject to administrative interpretation:

#### 1. Graduation Requirements

During his/her four years at Malden Catholic, a student must fulfill the following credit requirements:

Students must complete the following course of studies:

English	. 4.0 Credits
Mathematics	. 4.0 Credits
Theology	. 4.0 Credits
Foreign Language (1)	. 3.0 Credits
Science (2)	. 3.0 Credits (Biology, Chemistry, and Physics)
Social Studies	. 3.0 Credits (Freshman, Sophomore & Junior Years)
Exploring Computer Science (2)	. 0.5 Credits
Fine Arts/Music/Human Performance	. 0.5 Credits
Electives (3)	. 2.5 – 6.0 Credits

<sup>(1) 2.0</sup> Credits for CP Level Spanish.

Ordinarily, students who fail three or more full-year courses will not be promoted and will be asked to withdraw from Malden Catholic. 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 and fulfill all other obligations to the school. Before returning to Malden Catholic in the fall, students 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. Final decisions rest with Administration.

- 2. **Levels of Instruction**: Every effort is made to provide students with courses commensurate with their academic skills 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 (AP): 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 separately from tuition. Departmental approval, performance based.
  - B. Honors (Hon): Typically for students whose Entrance Test profiles range from the 80th 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 Accelerated or CP courses.

<sup>(2)</sup> For the Class of 2025 and future classes.

<sup>(3)</sup> Depending upon the number of AP classes in Junior and Senior Year and Foreign Language requirement.



# **ACADEMIC REGULATIONS (CONT)**

- C. Accelerated (Acc): For students whose Entrance Test profiles range broadly from the 35th-75th percentile, Accelerated courses continue essential skills mastery, move with a faster pace and at greater depth than CP courses, and develop habits of study for later success in a challenging college program.
- D. College Preparatory (CP): For students whose Entrance Test profiles range below the 35th percentile and who are still developing essential skills, College Preparatory courses teach fundamental understandings required for college success.

Note: A student wishing to move to a higher level at the end of the year should have a minimum average of 93% in his/her current level and department approval. Students not maintaining a 76% average in each course or students in the lowest 10% of any course may be placed in a lower section.

3. **Course Changes**: The Division Leader, in conjunction with School Counseling, oversees academic issues for students, in consultation with teachers. Every effort is made 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 his concerns.
- 2. Teacher 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 his/her School Counselor to determine scheduling feasibility and impact on student's overall schedule.
- 4. Parent wishing to continue the process should send a note of formal request for change by email to his/her School Counselor.

#### B. Parent-Initiated:

- Parent contacts teacher about concerns. 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 Division Leader, parent is referred
  to the teacher for preliminary discussion.
- 2. Parent wishing to continue the process asks son/daughter to see 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 exceptional. 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.

Please note: Leadership will be part of our Academic Program during the 2021-2022 school year. More information regarding the programs and for which grades will be forthcoming in May of 2021.



FRESHMAN YEAR

# PROGRAM OF STUDY [FRESHMEN ENROLLED IN THE BR. KEVIN PROGRAM]

**SOPHOMORE YEAR** 

Course	Credits	Course	Credits
Theology 1	1.0	Theology 2	1.0
English 1 CP		English 2	
Language Arts CP 1		Spanish 1	
World History 1		World History 2	
Biology 1	1.0	Chemistry 1	1.0
Exploring Computer Science	0.5	Geometry	1.0
Algebra 1	1.0	Electives	1.0
Human Performance	0.5		
-or- Fine Arts	0.5		
	TOTAL 7.0		TOTAL 7.0
CAMPUS MINISTRY		CAMPUS MINISTRY	
Community Service	15 Hours	Community Service	25 Hours
Retreat		Retreat	1
JUNIOR YEAR		SENIOR YEAR	
Course	Credits	Course	Credits
Theology 3		Theology 4	
English 3		English 4	
Spanish 2		Math	
US History		Electives	
Physics 1			
Algebra 2			
Electives			
	TOTAL 7.0		TOTAL 6.0
CAMPUS MINISTRY		CAMPUS MINISTRY	
Community Service	35 Hours	Community Service	90 Hours
Retreat	1	Retreat	1



# PROGRAM OF STUDY

FRESHMAN YEAR		JUNIOR YEAR -			
Course	Credits	Course	Credits		
Theology 1	1.0	Theology 3*	1.0		
English 1	1.0	English 3*	1.0		
Spanish 1, Italian 1, or Latin 1	1.0	Spanish 3, Italian 3, or Latin 3	1.0		
World History1*	1.0	U.S. History*	1.0		
Biology 1	1.0	Physics 1*	1.0		
Exploring Computer Science	0.5	Algebra 2, Pre-Calculus/Calculus,			
Algebra 1, Integrated Math 1,		or Pre-Calculus	1.0		
or Geometry	1.0	Electives	1.0		
Human Performance	0.5				
-or-	0.5				
Fine Arts	0.5				
	TOTAL 7.0		TOTAL 7.0		
* AP Course Offered		*AP Courses offered.			
CAMPUS MINISTRY		CAMPUS MINISTRY			
CAMPUS MINISTRY					
Community Service	15 Hours	Community Service	35 Hours		
Community Service		Community Service			
		•			
Community Service		•			
Community Service		•			
Community ServiceRetreat		Retreat			
Community Service	1 Credits	SENIOR YEAR	1 Credits		
Community Service	1  Credits1.0	SENIOR YEAR Course	1  Credits1.0		
Community Service	<i>Credits</i> 10	SENIOR YEAR  Course Theology 4	1  Credits1.0		
Community Service	<i>Credits</i> 1.01.01.0	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB,	<i>Credits</i> 1.0		
Community Service	**Credits**1.01.01.01.01.0	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB, Calculus, or College Algebra	<b>Credits</b> 1.01.0		
Community Service	**Credits**	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB,	<b>Credits</b> 1.01.0		
Community Service Retreat  SOPHOMORE YEAR  Course Theology 2 English 2 Spanish 2 World History 2* Chemistry 1	Credits         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB, Calculus, or College Algebra	<b>Credits</b> 1.01.0		
Community Service Retreat  SOPHOMORE YEAR  Course Theology 2 English 2 Spanish 2 World History 2* Chemistry 1 Geometry	Credits         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB, Calculus, or College Algebra	<b>Credits</b> 1.01.0		
Community Service Retreat  SOPHOMORE YEAR  Course Theology 2 English 2 Spanish 2 World History 2* Chemistry 1 Geometry	Credits	SENIOR YEAR  Course Theology 4 English 4* AP Calculus BC, AP Calculus AB, Calculus, or College Algebra	<i>Credits</i> 1.01.01.0		
Community Service Retreat  SOPHOMORE YEAR  Course Theology 2 English 2 Spanish 2 World History 2* Chemistry 1 Geometry Electives	Credits	SENIOR YEAR  Course Theology 4	<i>Credits</i> 1.01.01.0		
Community Service	Credits	SENIOR YEAR  Course Theology 4	Credits1.01.01.03.0		
Community Service Retreat  SOPHOMORE YEAR  Course Theology 2 English 2 Spanish 2 World History 2* Chemistry 1 Geometry Electives  *AP Course offered.	Credits	SENIOR YEAR  Course Theology 4	Credits1.01.01.03.0  TOTAL 6.0		



#### STEM CERTIFICATE REQUIREMENTS

In preparing all students for the global workforce, the integration of the STEM Certificate is to encourage student participation in science, technology, engineering, and math (STEM) courses and build their interest in STEM degrees and careers.

Students pursing a STEM Certificate must complete the following course of studies:

Mathematics	4.0 Credits (including Pre-Calculus)
Science	
STEM Electives	3.0 Credits
Technology & Engineering	0.5 Credits (Exploring Computer Science)
Total	11.5 Credits

# **Extracurricular Requirements:**

- Active participation in a STEM-based club (1 per year), for a total of three (3) years.
- Participation in STEM Innovation Fair for a total of two (2) years.

# **Important Notes:**

- Students are required to take one AP course, one PLTW course, and a third course, either AP or PLTW, as part of their 11.5 credits.
- Students must maintain an unweighted GPA average of 85% for all STEM Courses to earn the STEM certificate.

#### **AP Courses:**

AP Biology
AP Chemistry
AP Physics 1
AP Physics 2
AP Calculus BC
AP Calculus AB
AP Computer Science

AP Research (STE Chair Approval)

#### **STEM Elective Courses:**

Javascript Web Design Earth Science Marine Biology

Introduction to Mobile Robotics

Environmental Science Python Programming Anatomy & Physiology

#### **PLTW Courses:**

PLTW: Intro to Engineering Design PLTW: Principles of Engineering PLTW: Digital Electronics



Elective Courses Offered								
Department	Course # & Description	Level	Credit	Course Length	Grade Level			
Department		(see pp.2+3)	Hours		9	10	11	12
Interdisciplinary	030 AP Capstone Seminar	AP	1.0	Full Year			✓	
	040 AP Capstone Research	AP	1.0	Full Year				✓
	251 SAT/ACT Verbal Preparation	Acc	0.5	Semester			✓	
	252 Creative Writing	Acc	0.5	Semester			✓	✓
English	253 Journalism	Acc	0.5	Semester			✓	✓
	254 Literature of the Holocaust	Acc	0.5	Semester			✓	✓
	255 20 <sup>th</sup> Century Women Writers	Acc	0.5	Semester				✓
	350 AP Spanish Language & Culture	AP	1.0	Full Year				✓
Foreign	351 AP Latin	AP	1.0	Full Year				✓
Languages	352 Spanish 4	Hon	1.0	Full Year				✓
	353 Italian 4	Hon	1.0	Full Year				✓
	450 AP US Government & Politics	AP	1.0	Full Year				✓
	451 US Government & Current Issues	Acc	0.5	Semester				✓
	452 World War 2	Hon	0.5	Semester				✓
Social Studies	453 Psychology	Hon	1.0	Full Year			✓	✓
Coolar Claulos	454 Philosophy	Hon	0.5	Semester			✓	✓
	455 Accounting	Acc	1.0	Full Year			✓	✓
	457 Mock Trial	Hon	0.5	Semester				✓
	458 Economics	Acc	1.0	Full Year				✓
	511 Dance 1	Acc	0.5	Semester	✓	✓	✓	✓
	512 Dance 2	Acc	0.5	Semester		✓	✓	✓
	521 Choir 1	Acc	0.5	Semester	✓	✓	✓	✓
	522 Advanced Choir	Acc	1.0	Full Year		✓	✓	✓
	531 Drama	Acc	0.5	Semester	✓	✓	✓	✓
	532 Speech & Debate	Acc	0.5	Semester	✓	<b>✓</b>	✓	✓
	533 Musical Theater Workshop	Acc	0.5	Semester	✓	<b>\</b>	✓	✓
Fine Arts & Music	541 Music Appreciation	Acc	0.5	Semester			✓	✓
l mo / m to a maone	542 Music Theory & Piano Class	Acc	0.5	Semester	✓	✓	✓	✓
	543 Band	Acc	1.0	Full Year		✓	✓	✓
	551 Studio Art 1	Acc	0.5	Semester	✓	✓	✓	✓
	552 Studio Art 2	Acc	0.5	Semester		✓	<b>✓</b>	✓
	553 Painting	Acc	0.5	Semester		✓	✓	✓
	554 Sculpture	Acc	0.5	Semester		✓	<b>✓</b>	✓
	555 Printmaking	Acc	0.5	Semester		✓	<b>√</b>	✓
	556 Digital Imaging	Acc	0.5	Semester		<b>✓</b>	✓	✓
	557 Digital Design	Acc	0.5	Semester		✓	✓	✓



Elective Courses Offered (cont.)								
Department	Course # & Description	Level (see pp.2+3)	Credit	Course Length	Grade Level			
			Hours		9	10	11	12
	650 AP Biology	AP	1.0	Full Year			✓	✓
	651 AP Chemistry	AP	1.0	Full Year			<b>✓</b>	✓
	630 AP Physics 1	AP	1.0	Full Year				✓
Science	652 AP Physics 2	AP	1.0	Full Year				✓
	655 Marine Biology	Acc	0.5	Semester			<b>✓</b>	✓
	656 Earth Science	Acc	0.5	Semester			<b>✓</b>	✓
	657 Environmental Science	Acc	1.0	Full Year			✓	✓
	658 Anatomy & Physiology	Hon	1.0	Full Year				✓
	750 AP Computer Science	AP	1.0	Full Year			✓	✓
	751 Javascript	Hon	0.5	Semester		<b>✓</b>	<b>✓</b>	✓
	752 Python Programming	Hon	0.5	Semester		<b>✓</b>	<b>✓</b>	✓
Technology and Engineering	753 Web Design & Development	Acc	0.5	Semester		✓	✓	✓
	754 Introduction to Mobile Robotics	Acc	0.5	Semester		✓	✓	✓
	755 PLTW: Intro to Engineering Design	Hon	1.0	Full Year		✓	✓	✓
	756 PLTW: Principals of Engineering	Hon	1.0	Full Year			✓	✓
	757 PLTW: Digital Electronics	Hon	1.0	Full Year			✓	✓
Math	851 SAT/ACT Math Preparation	Acc	0.5	Semester			✓	
	951 Wellness	Acc	0.5	Semester		✓	✓	✓
Human	952 Human Performance 2	Acc	0.5	Semester		✓	✓	✓
Performance	953 Recreational Sports & Fitness	Acc	0.5	Semester		✓	✓	✓
	954 Yoga	Acc	0.5	Semester		✓	✓	✓



# INTERDISCIPLINARY

# **ELECTIVES**

The AP Capstone Program consists of two courses -- AP Seminar and AP Research -- taken in sequence in the Junior and Senior years. Students taking the Junior course should intend also to take the Senior one. AP Seminar will take the content typically associated with our Junior year Theology and focus on developing the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work. AP Research must be taken as a senior elective and not in place of Senior Theology.

If a student earns scores of 3 or above in AP Seminar and AP Research and on four additional AP Exams of one's choice, the student receives the AP Capstone Diploma<sup>™</sup>. Students earning scores of 3 or above in AP Seminar and AP Research will receive the AP Seminar and Research Certificate<sup>™</sup>.

It is recommended that students who do not earn a 3, 4, or 5 on the AP Seminar exam drop AP Research since they are no longer candidates for the certificate or diploma.

# **OPEN TO JUNIORS**

# 030 AP CAPSTONE SEMINAR

Advanced Placement, 1.0 Credit

Prerequisites: Administrative approval. Strong success in language-based Honors level courses, strong reading skills, suitable AP potential and enrollment in other AP courses.

In AP Seminar students learn to consider an issue from multiple perspectives, identify credible sources, evaluate strengths and weaknesses of arguments, and make logical, evidence-based recommendations. Students investigate a variety of topics through various viewpoints of personal choice. During the course, students complete a team project and an individual paper and presentation, as well as take a written end-of-course exam. These components contribute to the overall AP Seminar score.

Students will use a Digital Portfolio for assessments.

Note: Students taking this course are required to take the AP exam.

# **OPEN TO SENIORS**

# **040 AP CAPSTONE RESEARCH**

**Advanced Placement, 1.0 Credit** 

Prerequisites: Administrative approval. Successful completion of AP Capstone Seminar with a grade of 76 or above.

While working with a teacher / expert advisor, students will explore an academic topic, problem, or issue within the scope of a topic that interests them and design, plan, and conduct a year-long research-based investigation to address it. The course culminates in an academic paper of 4,000-5,000 words and a presentation, with an oral defense; during which the student will answer 3-4 questions from a panel of evaluators.

Note: Students taking this course are required to take the AP exam.



# **THEOLOGY**

# REQUIRED COURSES

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

#### **FRESHMAN YEAR**

#### 112 THEOLOGY 1

Accelerated, 1.0 Credit

Prerequisites: None.

Students will be given a general knowledge and appreciation of Sacred Scripture as God's Word made known to us. God reveals Himself to us through the Old and New Testament and His plan of Salvation: "The unity of the two Testaments proceeds from the unity of God's plan and his Revelation. The Old Testament prepares for the New and the New Testament fulfills the Old; the two-shed light on each other; both are true Word of God." CCC 140

Students will journey through the 73 books of the Bible through study of the context, message, history, and authorship of each book. This prayerful study of God's covenant will examine the living Tradition of the Church, its doctrines, and our role as members of the Body of Christ.

#### **SOPHOMORE YEAR**

#### 122 THEOLOGY 2

Accelerated, 1.0 Credit

Prerequisites: Successful completion of Theology 1.

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**

#### 132 THEOLOGY 3

Accelerated, 1.0 Credit

Prerequisites: Successful completion of Theology 2.

Theology 3 introduces the Church's rich body of social teaching that comes to us from the essential writings of popes, bishops, Saints, the Catechism, and Scripture. Together the class will focus on the essential message of Christ's moral teaching, the importance of love of God and neighbor. The course will examine the foundational values which ought to govern a just society though study and understanding of the 7 Themes of Catholic Social teaching: Life and Dignity of the Human Person, Call to Family, Community, and Participation, Rights and Responsibilities, Option for the Poor and Vulnerable, The Dignity of Work and the Rights of Workers, Solidarity, Care of God's Creation.



# **THEOLOGY**

# REQUIRED COURSES

#### **SENIOR YEAR**

#### 142 THEOLOGY 4: CATHOLIC SPIRITUALITY

Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Theology 3.

The purpose of this course is to explore vocations with an invitation to each student to explore his 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.

#### 143 THEOLOGY 4: GOD & MEDIA

Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Theology 3.

God and Media: This course allows students to see how the media, in its many forms, can play a role in understanding God and faith in today's world. By looking how it has historically been used, students will see the pros and cons of using media, how radio, TV, movies, music and the internet affect and are affected by the Catholic understanding of God and humanism, as well as how they can use the media to evangelize to the world.

# 145 THEOLOGY 4: WORLD RELIGIONS

Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Theology 3.

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.



# REQUIRED COURSES

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

#### **FRESHMAN YEAR**

211 ENGLISH 1 Honors, 1.0 Credit

Prerequisites: Administrative placement.

This honors course is designed for advanced students. In this course, students will learn writing skills to prepare them for high school, college, and a career. Through an intense study of literature, including a familiarization with formal literary terms, teachers hope to instill an enthusiasm for good literature. Quality works in the four major genres--short story, novel, drama and poetry--will be assigned. The course also includes the study of grammar, vocabulary and PSAT/SAT/ACT preparation.

212 ENGLISH 1 Accelerated, 1.0 Credit

Prerequisites: Administrative placement.

This accelerated course is designed for the college-bound student. In this course, students will study vocabulary, literature, grammar, writing, and PSAT/SAT/ACT preparation. Representative works in the four major genres-- short story, novel, drama, and poetry--will be assigned. Writing skills will emphasize the expository, descriptive, narrative and comparative paragraphs.

# 213 ENGLISH 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

This college preparatory course is designed to help students develop those learning tools essential to succeed in high school and beyond. Here, students will study grammar, vocabulary, literature, writing, and PSAT/SAT/ACT preparation. This course will not only strengthen students' grammatical and vocabulary skills through drill and practice, but it will also work to improve students' writing, reading, and study skills.

#### 214 LANGUAGE ARTS 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

This college preparatory English course helps students develop those learning tools essential to success in their continuing education. Students explore approaches to improved reading and writing, while they identify strengths and weaknesses in their methods of study. Through a focus on grammar, vocabulary, composition, and standardized testing strategies, students will work toward a mastery of basic learning and study skills. Varied activities will allow for both small-group and large-group interaction. Students assigned to this college preparatory level course are exempt from the study of foreign language in their freshman year.

Note: Students who take this course are taking it instead of a Foreign Language and therefore it does not count towards taking four years of English.



# REQUIRED COURSES

#### **SOPHOMORE YEAR**

221 ENGLISH 2 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 1 (Honors) with a grade of 76 or above or English 1 (Accelerated) with a grade of 93 or above.

This honors course is designed for highly motivated students who are capable of handling a challenging course of studies that emphasizes both literature and writing. Students are directed in a more intense examination of the various elements of genre study in an attempt to make them more proficient in the reading and analysis of a number of significant literary works. In the sophomore year, students hone their writing skills by expanding upon basic paragraph structure and essay writing taught in the freshman year. Solid grammar techniques are strengthened through a review of grammatical rules, corrective exercises, and writing practice. Vocabulary skills are cultivated through workbook exercises in conjunction with literature study and supplementary texts. This course also familiarizes the students with PSAT/SAT/ACT methods.

222 ENGLISH 2 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 1 (Accelerated) with a grade of 76 or above, or English 1 (College Preparatory) with a grade of 93 or above.

This accelerated course is designed to meet the needs of the college-bound student. This course serves to strengthen students' use of language through the study of vocabulary, grammar, writing, and the four literary genres: short story, drama, poetry, and the novel. Students further their writing/vocabulary skills by expanding upon the basic paragraph structure taught in the freshman year, writing on a variety of topics drawn from areas such as science, history, biography, art, and literature. English II also includes PSAT/SAT/ACT skills.

#### **223 ENGLISH 2**

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement.

This college preparatory course is designed to strengthen the student's grammatical and vocabulary skills through constant drill and practice and to clarify their perception of writing and literary techniques encountered in reading. This course also familiarizes students with PSAT/SAT/ACT methods.



# REQUIRED COURSES

# **JUNIOR YEAR**

# 230 AP ENGLISH LANGUAGE AND COMPOSITION

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 2 (Honors) with a grade of 93 or above.

The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytical 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 rhetorical elements and their effects in non-fiction texts from many disciplines and historical periods. Students must write a well-documented MLA style research paper.

Note: Students taking this course are required to take the AP Exam.

231 ENGLISH 3 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 2 (Honors) with a grade of 76 or above, or English 2 (Accelerated) with a grade of 93 or above.

This honors 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 review, work with SAT/ACT preparation, analysis of outside reading selections, and further development of writing skills. The student is also expected to complete an MLA-documented research paper. The course employs the use of critical thinking in its methods.

232 ENGLISH 3 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 2 (Accelerated) with a grade of 76 or above, or English 2 (College Preparatory) with a grade of 93 or above.

This accelerated course is designed to motivate the student to understand the workings of American literature from 1650 to the present, to incorporate writing skills within the curriculum, to review grammar, to work with SAT/ACT preparation, and to discuss and interpret outside reading selections. The students are also expected to write an MLA-formatted research paper.

# 233 ENGLISH 3

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement.

This college preparatory course is designed to motivate the student to understand the workings of American literature from 1650 to the present, to incorporate writing skills within the curriculum, to review grammar, to work with SAT/ACT preparation, and to discuss and interpret outside reading selections at a rate consistent with the ability of students in the level. The students are also expected to write an MLA-formatted research paper.



# REQUIRED COURSES

# **SENIOR YEAR**

# 240 AP ENGLISH LITERATURE AND COMPOSITION Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of AP English Language and Composition with a grade of 80 or above or English 3 (Honors) with a grade of 93 or above.

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 ways 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 and at least one well-documented research paper that requires students to analyze and interpret literary works.

Note: Students taking this course are required to take the AP Exam.

241 ENGLISH 4 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 3 (Honors) with a grade of 76 or above, or English 3 (Accelerated) with a grade of 93 or above, or AP English Language and Composition with a grade below 80.

This honors 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.

# 242 ENGLISH 4 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of English 3 (Accelerated) with a grade of 76 or above, or English 3 (College Preparatory) with a grade of 93 or above.

This accelerated course is designed to meet the needs of the college-bound student. The course concentrates on a close textual analysis of the major works and periods of British literature. Writing is used to enhance analytical and critical thinking skills. Additionally, students are expected to write at least one well-documented research paper.

#### **243 ENGLISH 4**

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement.

The college preparatory course is designed to develop an interaction of the four basic communication skills: listening, speaking, reading, and writing. This course stresses these skills as students learn to apply them to their study of the four major genres -- poetry, novel, drama, and short story -- in British literature. In addition to writing compositions, which will exercise students in writing clearly and creatively, students will be required to produce a well-documented research paper.



# **FNGLISH**

# **ELECTIVES**

#### **OPEN TO JUNIORS**

#### 251 SAT/ACT VERBAL PREPARATION

Accelerated, 0.5 Credit

Prerequisites: None.

Both ACT and SAT Verbal Preparation will provide students with the information needed to do well on the verbal questions of these tests. In addition to preparing for specific question types on both exams, this course will give students pointers in time management, anxiety relief, scoring, and general standardized test-taking.

#### **OPEN TO JUNIORS & SENIORS**

#### **252 CREATIVE WRITING**

Accelerated, 0.5 Credit

Prerequisites: None.

This course is designed to afford students the opportunity to develop their writing skills across a range of genres. Students will read literary samples that will serve as samples of the kind of writing the students will produce; these include one act plays/screenplays, poetry, short stories, and personal narratives. Students will share their work regularly with their peers while developing their skills in peer and self-editing.

253 JOURNALISM Accelerated, 0.5 Credit

Prerequisites: None.

Hands-on practice in how to write for newspapers. Students will study professional writing and write their own articles on news, sports, opinions, and the arts. The course will allow opportunity for publication in conjunction with the Crystal 99.

#### 254 LITERATURE OF THE HOLOCAUST

Accelerated, 0.5 Credit

Prerequisites: None.

A study of the Holocaust through a variety of genres, including poetry, novels, short stories, graphic novels, and memoirs, to gain a better understanding of the ideas presented by the Holocaust as a significant event in world history. This class will encourage students to reflect upon and respond to many of the profound questions this event raises. Some of these questions will focus on literature's role in the shaping of historical memory.

# **OPEN TO SENIORS**

#### 257 20TH CENTURY WOMEN WRITERS

Accelerated, 0.5 Credit

Prerequisites: None.

This course introduces students to female authors of fiction, poetry, and critical theory from around the world. The course is aimed at providing students with a historical approach to understanding literature by female authors.

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# **COURSES OFFERED**

Students that take Course Spanish 1 (College Preparatory) will be required to take only two years (2 credits) of Spanish. All other students are required to take three years (3 credits) of Spanish, Italian, or Latin to meet their foreign language requirement. Students can elect to take a 2<sup>nd</sup> foreign language as long as they meet their graduation requirements for electives.

#### **SPANISH 1**

311 SPANISH 1 Honors, 1.0 Credit

Prerequisites: Administrative placement. Spanish Placement Exam and previous Spanish experience.

This course is designed for the student who has a strong background in elementary Spanish. Spanish 1 Honors introduces basic grammatical structure, vocabulary, and verb forms reinforced by fast-paced review. Readings from the text material introduce students to various elements of Hispanic culture and regularly assigned compositions develop writing skills. Conversational skills are strengthened through the use of audio selections and the instructor's use of Spanish as the primary language in the classroom.

312 SPANISH 1 Accelerated, 1.0 Credit

Prerequisites: Administrative placement. Spanish Placement Exam and/or previous Spanish experience.

This course is designed for a student with good language learning capability. It provides a medium-paced, strong introduction to the Spanish language as a means of communication. Special emphasis is placed on conversational skills. Cultural readings and exercises in writing will be included. Spanish becomes the primary language of the instructor as the student progresses.

### **313 SPANISH 1**

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement. Open to all students except those enrolled in Language Arts 1.

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.



# COURSES OFFERED

#### **SPANISH 2**

321 SPANISH 2 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 1 (Honors) with a grade of 85 or above or Spanish 1 (Accelerated) with a grade of 93 or above.

This second-year honors course emphasizes fast-paced oral communication and the grammatical essentials of the Spanish language. Emphasis is placed on the mastery of all nine tenses of the indicative mood, the imperative mood, and the formation of the present subjunctive tense, and its use in noun clauses. To reinforce the use of these grammatical concepts, the students will read various selections that stress the cultural aspects of the Hispanic world. Writing is required, and the students and the instructor will use Spanish exclusively in the classroom. Audio and video selections will continue to strengthen student oral and aural proficiency.

322 SPANISH 2 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 1 (Accelerated) with a grade of 80 or above, Spanish 1 (College Preparatory) with a grade of 93 or above, or Spanish 1 (Honors) with a grade below 80.

This second-year Spanish accelerated class stresses oral communication and the essentials of Spanish grammar. Emphasis is placed on the study of regular and irregular verbs in the nine indicative tenses, the formation and use of the present subjunctive in noun clauses, and the imperative 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.

# **323 SPANISH 2**

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Successful completion of Spanish 1 (College Preparatory), or Spanish 1 (Accelerated) with a grade below 80.

The college preparatory level of Spanish 2 begins with a review of the grammatical structures and verb forms introduced in Spanish 1, at a pace appropriate to the students. In addition, students learn new structures and verb forms while they continue to develop vocabulary skills. Teachers provide constant review and steady reinforcement through worksheets and oral language practice.

Note: Students in this course will be required to take only two years of Spanish.



# COURSES OFFERED

#### **SPANISH 3**

331 SPANISH 3 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 2 (Honors) with a grade of 85 or above or Spanish 2 (Accelerated) with a grade of 93 or above, and work of superior quality as determined by the Spanish 2 teacher.

This advanced course stresses oral communication, grammar, literature, and composition. Its objective is threefold: to acquaint students with important authors of Spain and Spanish America through Spanish literature and poetry, to demonstrate the use of advanced Spanish grammatical structure, and to enable the students to employ this advanced grammar in expanding their speaking, listening, reading, and writing abilities.

332 SPANISH 3 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 2 (Accelerated) with a grade of 80 or above, or Spanish 2 (College Preparatory) with a grade of 93 or above, and work of excellent quality as determined by the Spanish 2 teacher.

This is an intermediate level class whose aim is to strengthen listening and speaking skills and to improve reading and writing ability. Spanish 3 introduces the student to important authors of Spain and Spanish America and exposes the student to differences and similarities among the peoples of the Spanish-speaking world. In addition, the instructor will employ accompanying audio and video selections to expand student oral and aural abilities. Teachers use Spanish almost exclusively in their instruction.

#### **333 SPANISH 3**

#### College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Successful completion of Spanish 2 (College Preparatory) with a grade of 80 or above or Spanish 2 (Accelerated), and qualified and motivated student achievement as determined by the Spanish 2 teacher.

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.



# **COURSES OFFERED**

#### **SPANISH 4**

# **350 AP SPANISH LANGUAGE AND CULTURE**

Advanced Placement, 1.0 Credit

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

Note: Students taking this course are required to take the AP Exam.

352 SPANISH 4 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Spanish 3 (Honors) with a grade of 80 or above or Spanish 3 (Accelerated) with a grade of 90 or above, work of excellent quality, and recommendation of Spanish 3 teacher.

This course is an intensive examination of Spanish language, literature, and culture. The major points of grammar are reviewed through reading, writing, listening, and speaking activities. Cultural and literary readings introduce various themes including education, the arts, family life, and heroism.



# COURSES OFFERED

#### **ITALIAN**

318 ITALIAN 1 Honors, 1.0 Credit

Prerequisites: Departmental approval. Open to all students except those enrolled in Language Arts 1. May be taken in lieu of, or in addition to, Spanish.

Italian 1 introduces basic Italian 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 Italian culture.

328 ITALIAN 2 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Italian 1 (Honors), work of excellent quality, and recommendation of Italian 1 teacher.

Italian 2 continues the study of basic Italian 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 Italian culture.

338 ITALIAN 3 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Italian 2 (Honors), work of excellent quality, and recommendation of Italian 2 teacher.

Italian 3 is a continuation of the study of the language and culture of Italy at a more accelerated level. Students will expand their knowledge of grammatical structures and vocabulary, with more advanced verbal structures and tenses introduced. The class, almost exclusively taught in Italian, will provide students with practice in speaking, reading, listening and writing on a daily basis. The study of Italian culture is an essential component of the course.

353 ITALIAN 4 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Italian 3 (Honors) with a grade of 85 or above, work of excellent quality, and recommendation of Italian 3 teacher.

Italian 4 is a continuation of the study of the language and culture of Italy at a more accelerated level. Students will expand their knowledge of grammatical structures and vocabulary, with more advanced verbal structures and tenses introduced. The class, almost exclusively taught in Italian, will provide students with practice in speaking, reading, listening and writing on a daily basis. The study of Italian culture is an essential component of the course.



# COURSES OFFERED

#### **LATIN**

314 LATIN 1 Honors, 1.0 Credit

Prerequisites: Departmental approval. May be taken in lieu of, or in addition to, Spanish/ Italian.

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.

324 LATIN 2 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Latin 1, work of excellent quality, and recommendation of Latin 1 teacher.

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.

334 LATIN 3 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Latin 2, work of excellent quality, and recommendation of Latin 2 teacher.

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.

# **351 AP LATIN**

### Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Latin 3 with a grade of 93 or above, work of excellent quality, recommendation of Latin 3 teacher, 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.

Note: Students taking this course are required to take the AP Exam.



# REQUIRED COURSES

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

#### **FRESHMAN YEAR**

### **410 AP WORLD HISTORY: MODERN**

Advanced Placement, 1.0 Credit

Prerequisites: Administrative placement.

Modern 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; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. 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.

Note: Students taking this course are required to take the AP Exam.

# 411 WORLD HISTORY 1: ANCIENT TO PRE-MODERN

Honors, 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.

#### 412 WORLD HISTORY 1: ANCIENT TO PRE-MODERN

Accelerated, 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.



# REQUIRED COURSES

### **SOPHOMORE YEAR**

# **420 AP EUROPEAN HISTORY**

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of AP World History: Modern with a grade of 76 or above or World History 1 (Honors) with a grade of 93 or above.

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.

Note: Students taking this course are required to take the AP Exam.

#### **421 WORLD HISTORY 2: MODERN TO CURRENT**

Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of World History 1 (Honors) with a grade of 76 or above, World History 1 (Accelerated) with a grade of 93 or above, or AP World History:

Modern..

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.

# **422 WORLD HISTORY 2: MODERN TO CURRENT**

Accelerated, 1.0 Credit

Prerequisites: Departmental placement. Required of all Sophomores not taking AP European History or World History 2 (Honors).

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.



# REQUIRED COURSES

# **JUNIOR YEAR**

# **430 AP UNITED STATES HISTORY**

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of AP European History with a grade of 76 or above, or World History 2 (Honors) with a grade of 93 or above.

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.

Note: Students taking this course are required to take the AP Exam.

431 U.S. HISTORY Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of World History 2 (Honors) with a grade of 76 or above, World History 2 (Accelerated) with a grade of 93 or above, or AP European History.

Honors 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.

432 U.S. HISTORY Accelerated, 1.0 Credit

Prerequisites: Departmental placement. Required of all Juniors not taking AP United States History or U.S. History (Honors).

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.

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# **ELECTIVES**

#### **OPEN TO JUNIORS & SENIORS**

453 PSYCHOLOGY Honors, 1.0 Credit

Prerequisites: None.

The Psychology course is designed to introduce students to the systemic and scientific study of the behavior and mental processes of human beings. Throughout the year, students will examine the psychology of personality, child development, the brain, drug addiction, sleep, sensation and perception, learning, memory and cognition, sexual identity development, social situations and behavior, psychological disorders, and approaches to treatment and therapy. The purpose of this course is to give students a "taste" of psychology.

454 PHILOSOPHY Honors, 0.5 Credit

Prerequisites: None.

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.

455 ACCOUNTING Accelerated, 1.0 Credit

Prerequisites: None.

Accounting is a full-year survey of basic accounting principles. Students will gain an understanding of topics, including the preparation of balance sheets, financial statements, as well as cost accounting methods. The course will focus on business issues related to capital and expense utilization and cover depreciation. This course also emphasizes consumer topics relating to the economics of buying on credit, investment opportunities, and budgeting. Students will experience the stock market by participating in the *Boston Globe*-Stock Market Game (smgww.org).



# **ELECTIVES**

#### **OPEN TO SENIORS**

# 450 AP UNITED STATES GOVERNMENT AND POLITICS Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of AP United Sates History with a grade of 76 or above or U.S. History (Honors) with a grade of 93 or above.

This 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.

Note: Students taking this course are required to take the AP Exam.

#### **451 U.S. GOVERNMENT & CURRENT ISSUES**

Accelerated, 0.5 Credit

Prerequisites: None.

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 20<sup>th</sup> 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.

452 WORLD WAR II Honors, 0.5 Credit

Prerequisites: None.

World War II is a one-semester course in which students will learn about the causes, chief events, and outcome of the most costly and extensive war in history. This is the war of the "greatest generation," and this course will feature the military history of this epic conflict between democracy and fascism. The course will begin with the aftermath of World War I and will conclude with the surrender of Germany and Japan in 1945. Students will recognize the relationship between events in the recent past and the shaping of current foreign and domestic policies. Students will acquire skills in reading primary historical documents as well as secondary sources. Research, writing, and presentations are major components of this course.



# **ELECTIVES (CONT.)**

# **OPEN TO SENIORS**

457 MOCK TRIAL Honors, 0.5 Credit

Prerequisites: Faculty approval. Students must be Seniors actively involved in the Mock Trial program for a minimum of two (2) years prior.

In this student-driven independent study course, the student(s) will engage in both practical and theoretical study in preparation for the Massachusetts Bar Association Mock Trial Tournament, to be held from January – March 2019. For this year, theoretical preparation will include study of civil case law in the United States, Massachusetts General Law, the Federal Rules of Evidence, and the 2018-2019 MASSBAR Mock Trial case (Case TBA in October 2019). Practical preparation will incorporate demonstrating leadership on the Malden Catholic Mock Trial Team, taking on critical trial roles, assisting the Mock Trial Team in digesting the rules of evidence, keeping records for the Mock Trial team, summarizing the case and all related affidavits, and writing an opening and/or closing argument to be used in competition in the 2019 season. Satisfactory completion of the course will include fulfillment of all requirements stated above; grades will be based on effort put into both the theoretical and practical facets of the course and will be given for Quarters 1 and 2 of the academic year.

### **458 ECONOMICS**

Accelerated, 1.0 Credit

Prerequisites: None.

This is a full-year course teaching basic economic principles and concepts. The student gains understanding of government economic policy, money and banking issues, the stock market, the law of supply and demand, and international trade and foreign exchange markets. This course also emphasizes consumer topics relating to the economics of buying on credit, investment opportunities, and budgeting. Students will experience the stock market by participating in the *Boston Globe* stock market game.



# **ELECTIVES**

All students are required to take a minimum of one half-year (0.5 credits) of Fine Arts or Human Performance to meet their graduation requirements.

#### DANCE

**511 DANCE 1** 

Accelerated, 0.5 Credit

Prerequisites: None

Dance 1 is an arts course designed for all students regardless of their dance experience. The focus is to explore 6 different dance styles including ballet, jazz, hip-hop/urban, modern, contemporary, and social dance. Course goals include the building of self-discipline, self-confidence and dedication through dance using the body as an expressive instrument; learning the fundamentals of choreography; exposure to dance history and culture; the development of a basic dance vocabulary; and to increase rhythmic ability.

512 DANCE 2 Accelerated, 0.5 Credit

Prerequisites: Dance 1. Open to Sophomores, Juniors and Seniors.

Dance 2 is an arts course designed as a continuation of Dance 1. This course examines the exciting world of live concerts, music videos and awards shows in commercial dance, versus the academic, eloquent, and highly technical world of concert dance. Students are evaluated on movement as well as written work, with concentration on the creation of dance pieces as defined by the National Core Arts Standards. Course goals include the building of self discipline, self confidence and dedication through dance using the body as an expressive instrument; learning the fundamentals of dance techniques, history and culture; the development of a dance vocabulary from concept to choreography to performance; and the development of artistic expression through music interpretation and quality of movement.

#### **VOCAL STUDIES**

**521 CHOIR 1** 

Accelerated, 0.5 Credit

Prerequisites: None

As a member of this singing ensemble, you will further develop your musicianship and total understanding of music in such a way that you can continue to enjoy, learn, and perform music as an independent musician. The students will sing choral music from a variety of styles and learn the basics of choral technique. The Malden Catholic choral experience will not only prepare students to perform in high school but will prepare them, so they can enjoy music throughout their life as a performer, creator or consumer of music. The Choir I students are required as part of their grade to participate in school liturgies and one evening performances during the semester.

### **522 ADVANCED CHOIR**

Accelerated, 1.0 Credit

Prerequisites: Choir 1. Open to Sophomores, Juniors and Seniors.

This is a full year course. As a member of the advanced singing ensemble the students will further develop their musicianship and total understanding of singing in harmony, music notation, and sight reading. The students will sing choral music from a variety of styles including a cappella and learn more advanced choral techniques. The Advanced choir students are required as part of their grade to participate in school liturgies, two evening performances during the school year, and any requested public performances.



# **ELECTIVES**

# **THEATRE**

531 DRAMA Accelerated, 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.

#### **532 SPEECH & DEBATE**

Accelerated, 0.5 Credit

Prerequisites: None.

Speech and Debate 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.

#### **533 MUSICAL THEATER WORKSHOP**

Accelerated, 0.5 Credit

Prerequisites: None

The Musical Theater Workshop is a half year course that engages students in a variety of approaches to the study and practice of vocal performance in Musical Theater. This is a course designed for the young singing actor who wishes to enhance their theater skills and knowledge of musical theater. Students will observe the instructor coaching singers in theatrical material, both in performance and audition settings. Each vocalist will have his/her moment to perform each week. Text and character analysis; choosing and fully realizing the dramatic action of the material; and determining the appropriate vocal style, correct key, and song's routine is discussed in each class. Emphasis is on the dramatic elements of the material as a basis for musical decisions, and how musical and theatrical aesthetics inform each other. Basic elements of song structure will also be taught for the benefit of the young acting singer.



# **ELECTIVES**

#### **MUSIC**

#### **541 MUSIC APPRECIATION**

Accelerated, 0.5 Credit

Prerequisites: Open to Juniors and Seniors.

Students will explore music's various functionalities in order to gain a deeper understanding and appreciation for all types of music. The course examines the basic core musical elements such as melody, rhythm, harmony, form, and texture. Throughout the course, students apply their understanding and focus on music's various purposes and functions, tracking these categories through historical transformations with a focus on sacred music, music for stage and screen, music for public entertainment, music as identity, and music as media. This course includes a broad series of lessons and activities that offer a variety of modalities for ultimate student engagement and content retention.

#### **542 MUSIC THEORY & PIANO CLASS**

Accelerated, 0.5 Credit

Prerequisites: None.

This is a half year course designed for 6-10 students who wish to develop basic piano playing skills or expand on their existing skills. Time in class will be spent both on and off the keyboard. Students will be learning together and playing individually to master the techniques of playing the piano. Students will gain an understanding of musical notation, music theory, develop their individual playing skills, develop effective practice techniques, and learn to play full songs.

543 BAND Accelerated, 1.0 Credit

Prerequisites: Must have instrument experience. Open to Sophomores, Juniors and Seniors.

Band is a full year offering for students with previous instrument experience. Educational emphasis is placed on the advancement of instrumental technique, further development of music reading and comprehension skills, independent musicianship, style, and a deeper understanding of small group ensemble music, and orchestral literature. Literature will contain both classical, popular, and band repertoire. Students will perform both in small group ensemble projects and as a large group.



# **ELECTIVES**

# **VISUAL ARTS**

#### 551 STUDIO ART 1

Accelerated, 0.5 Credit

Prerequisites: None.

Basic drawing is an acquired skill. With instruction and practice, anyone can improve at it. Studio Art 1 guides students through a developmental series of drawing strategies and techniques to help them gain the perceptual skills needed to make perspective drawings and observational drawings. These drawings could be a valuable foundation to those who may later be interested in applying to a school of art or architecture.

# 552 STUDIO ART 2 Accelerated, 0.5 Credit

Prerequisites: Successful completion of Studio Art 1 with a 76 or above. Open to Sophomores, Juniors and Seniors.

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.

#### 553 PAINTING Accelerated, 0.5 Credit

Prerequisites: Successful completion of Studio Art 1 with a 76 or above. Open to Sophomores, Juniors and Seniors.

This painting course explores a variety of painting techniques and mediums. Students will explore the Elements of Art and the Principles of Design through representational and abstract paintings.

#### 554 SCULPTURE Accelerated, 0.5 Credit

Prerequisites: Successful completion of Studio Art 1 with a 76 or above. Open to Sophomores, Juniors and Seniors.

This course will introduce students to a variety of sculptural techniques, materials, and tools for working with three dimensional materials. Students will create sculptures with additive and subtractive techniques using various materials, including cardboard, wire, string, fabric, plaster, clay and found objects.

# 555 PRINTMAKING Accelerated, 0.5 Credit

Prerequisites: Successful completion of Studio Art 1 with a 76 or above. Open to Sophomores, Juniors and Seniors.

This course is an introduction to the basic techniques of printmaking. Students will create prints using intaglio and relief techniques, as well as stencil and photo transfers.



# **ELECTIVES**

# **VISUAL ARTS (CONT)**

#### **556 DIGITAL IMAGING**

Accelerated, 0.5 Credit

Prerequisites: None.

Digital Imaging teaches the fundamentals of altering and creating images using Adobe Photoshop. Through personal practice, demonstration, lecture, and critique students will learn the basics of digital editing. This is a project-based course where students will develop an eye for composition, color, and value while creating striking digital art.

#### **557 DIGITAL DESIGN**

Accelerated, 0.5 Credit

Prerequisites: None

Digital Design is an art course in which students learn graphic design concepts. Ideas start out as sketches on paper and then become vector-based digital art using Adobe Illustrator. Students learn about the Elements of Art, focusing on the Principles of Design, while creating logos, fonts, and digital drawings.



# **SCIENCE**

# REQUIRED COURSES

All students are required to take three years (3.0 credits) of Lab Science to meet their graduation requirements. These courses must include Biology, Chemistry, and Physics. **Note: Each science course offered is considered a Laboratory Science.** 

# **BIOLOGY**

611 BIOLOGY 1 Honors, 1.0 Credit

Prerequisites: Administrative placement. Required of freshmen not placed in Biology 1 (Accelerated) or Biology 1 (College Preparatory).

Biology 1 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.

612 BIOLOGY 1 Accelerated, 1.0 Credit

Prerequisites: Administrative placement. Required of freshmen not placed in Biology 1 (Honors) or Biology 1 (College Preparatory).

Biology 1 is designed to teach subject matter in a manner which employs active learning on the part of students. Students are involved directly with concepts and skills to be learned through an array of instructional activities, labs, projects, illustrations, interactive readings, and inquiry discussions. Topics include cell biology, reproduction, plant and animal kingdoms, genetics, evolution and classification.

# 613 BIOLOGY 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement. Required of freshmen not placed in Biology 1 (Honors) or Biology 1 (Accelerated).

Biology 1 is designed to teach subject matter in a manner which employs active learning on the part of students. Students are involved directly with concepts and skills to be learned through an array of instructional activities, labs, projects, illustrations, interactive readings, and inquiry discussions. Topics include cell biology, reproduction, plant and animal kingdoms, genetics, evolution, and classification.



# **SCIENCE**

# REQUIRED COURSES

### **CHEMISTRY**

621 CHEMISTRY 1 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Biology 1 (Honors) with a grade of 76 or above or Biology 1 (Accelerated) with a grade of 93 or above.

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.

# 622 CHEMISTRY 1 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Biology 1 (Accelerated) with a grade of 76 or above or Biology 1 (College Preparatory) with a grade of 93 or above.

Accelerated 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.

#### 623 CHEMISTRY 1

### College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Required of students not placed in Chemistry 1 (Honors) or Chemistry 1 (Accelerated).

Accelerated 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**

## REQUIRED COURSES

### **PHYSICS**

### **630 AP PHYSICS 1: ALGEBRA-BASED**

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Chemistry 1 (Honors) with a grade of 93 or above and Algebra 2/Trigonometry (or take it concurrently).

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.

Note: Students taking this course are required to take the AP Exam.

631 PHYSICS 1 Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of honors level Math.

Physics is a study of mechanics, wave phenomena, and if time permits, electricity, and magnetism. The course is intended as a preparation for college level study in science, but not exclusively for prospective science majors. Strong emphasis is placed on the development of mathematical analysis through experimentation and problem-solving skills as they apply to physics.

632 PHYSICS 1 Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of accelerated level Math.

A study of mechanics, wave phenomena, electricity, and magnetism, Physics 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.

#### **633 PHYSICS 1**

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Required of all students not placed in AP Physics 1: Algebrabased, Physics 1 (Honors) or Physics 1 (Accelerated).

A study of mechanics, wave phenomena, electricity, and magnetism, Physics 1 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.



## SCIENCE

## **ELECTIVES**

### **OPEN TO JUNIORS & SENIORS**

## **650 AP BIOLOGY**

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Biology 1 (Honors) with a grade of 93 or above

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.

Note: Students taking this course are required to take the AP Exam.

### **651 AP CHEMISTRY**

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Chemistry 1 (Honors) with a grade of 93 or above, and Algebra 2/Trigonometry, Integrated Math 2, or Algebra 2.

The AP Chemistry course provides students with a college-level foundation to support future advanced course work 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. Class size will be limited to 16 students.

Note: Students taking this course are required to take the AP Exam.

### **655 MARINE BIOLOGY**

Accelerated, 0.5 Credit

Prerequisites: None.

Marine biology will begin by discussing basic properties of the ocean: geomorphology, temperature, and water circulation. We will then discuss the various communities/environments present in the ocean: deep-sea, inter-tidal, tropical, etc.



## **SCIENCE**

## **ELECTIVES (CONT.)**

### **OPEN TO JUNIORS & SENIORS**

### **656 EARTH SCIENCE**

Accelerated, 0.5 Credit

Prerequisites: None.

Earth Science covers the study of Earth - its minerals and energy resources, processes inside and on its surface, its past, water, weather and climate, the environment and human actions, and astronomy.

#### **657 ENVIRONMENTAL SCIENCE**

Accelerated, 1.0 Credit

Prerequisites: None.

Environmental Science deals with the interrelationships between humans and the Earth. It explores the interactions and relationships that exist between them. Environmental Science is interdisciplinary in nature drawing upon Biology, Earth Science, Botany, Chemistry, and the social sciences. The course is divided into six areas: Ecosystems – basic units of the natural world, dimensions of the human population, renewable resources and the role of conservation, energy and energy sources, types of pollution and prevention, and plans for a sustainable future. Students will be expected to incorporate technology into their laboratory assignments and class activities.

## **ELECTIVES**

#### **OPEN TO SENIORS**

### 652 AP PHYSICS 2: ALGEBRA-BASED

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of AP Physics 1: Algebra-Based with a grade of 76 or above.

The AP Physics 2 course 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 fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics.

Note: Students taking this course are required to take the AP Exam.

## 658 ANATOMY AND PHYSIOLOGY

Honors, 1.0 Credit

Prerequisites: Acceptance based on academic performance in previous science courses, recommendation of science teachers in Biology and Chemistry (if applicable) and recommendation of current honors level science teacher.

This year-long course is designed to give students an understanding of the fundamental and principal 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.



## TECHNOLOGY & ENGINEERING

## REQUIRED COURSES

### **OPEN TO FRESHMEN**

### 712 EXPLORING COMPUTER SCIENCE

Accelerated, 0.5 Credit

Prerequisites: Administrative placement.

This course is designed to introduce students to the breadth of the field of computer science through an exploration of engaging and accessible topics. Rather than focusing the entire course on learning particular software tools or programming languages, the course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems.

The goal of Exploring Computer Science is to develop in students the computational practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today's students. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues.

Malden Catholic incorporates tools and software that students have access throughout the school. Students learn how to navigate the cloud (OneDrive and/or Google Drive), use of browser applications, Google Classroom and new technologies as they arise.

This course is required for the STEM certificate track.

## **ELECTIVES**

## **OPEN TO SOPHOMORES, JUNIORS, & SENIORS**

751 JAVASCRIPT Honors, 0.5 Credit

Prerequisites: None.

This course will outline the fundamentals of computer science including a historical look at computers, computer ethics and move into the core principals 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.

### **752 PYTHON PROGRAMMING**

Honors, 0.5 Credit

Prerequisites: None.

This course will teach the foundations of computer science and basic programming using Python, with an emphasis on helping students develop logical thinking and problem-solving skills.

### **753 WEB DESIGN & DEVELOPMENT**

Accelerated, 0.5 Credit

Prerequisites: None.

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.



## TECHNOLOGY & ENGINEERING

## **ELECTIVES**

### **OPEN TO UPPERCLASSMEN**

### **754 INTRODUCTION TO MOBILE ROBOTICS**

Accelerated, 0.5 Credit

Prerequisites: None.

This semester course introduces students to the field of robotics. Students research the history of robotics, different types of robots in use, current robotic technology and trends, and deliver presentations of these topics. Student will also produce a research paper on a topic related to robotics. The course begins with a study of basic robotic components (mechanical structure, effectors, sensors, power, computers and control), an introduction to mechanical construction and an introduction to computer programming for control. The course utilizes Carnegie Mellon University's Robotics Engineering I curriculum, supplemented with challenges ranging from basic tasks including traveling set distances and paths, avoiding obstacles and finding objects; and grow to more challenging missions such as data reporting, rope climb, and robot sumo wrestling among others. Readings and research are expected. No text is required for the course, but students are expected to procure and maintain an engineering notebook. Requirements and format for the notebook will be discussed during the first week of class. *Due to equipment limitation, class size is limited to a maximum of 20 students*.

### 755 PLTW: INTRODUCTION TO ENGINEERING DESIGN

Honors, 1.0 Credit

Prerequisites: Preference given to STEM Track students.

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.

Note: Students taking this course are required to take the PLTW End of Completion Assessment.



## TECHNOLOGY & ENGINEERING

## **ELECTIVES**

### **OPEN TO UPPERCLASSMEN**

## **756 PLTW: PRINCIPLES OF ENGINEERING**

Honors, 1.0 Credit

Prerequisites: Preference given to STEM Track students and successful completion of Introduction to Engineering and Design.

Principals of Engineering (POE) is a high school-level course of engineering. The course exposes students to some major concepts they will encounter in a post-secondary engineering course of study. Students have an opportunity to investigate engineering and high-tech careers. POE gives students the opportunity to develop skills and understanding of 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 problem-solving skills based upon engineering concepts. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

Note: Students taking this course are required to take the PLTW End of Completion Assessment.

### **757 PLTW: DIGITAL ELECTRONICS**

Honors, 1.0 Credit

Prerequisites: Preference given to STEM Track students and successful completion of Introduction to Engineering and Design.

The Third course in the Project Lead the Way sequence is Digital Electronics. As the world continues to become more reliant upon electronics, knowledge of Digital Electronics will continue to be more valuable in the workforce. Students in Digital Electronics learn the circuitry that is utilized to build basic computer processors. To accomplish this, students build a number of computers simulated and live circuits through the school year. One example control circuit that students build is a voting machine where there is a president, vice president, secretary, and treasurer. While each of these members have a vote, the circuit that the students build will cause a light to go on if there is a majority vote. Likewise, if there is a tie vote, the president will have the overriding vote. The Digital Electronics course concludes the school year with students programming BOE Bot microprocessors/ robots to perform various class competitions.

Note: Students taking this course are required to take the PLTW End of Completion Assessment.

### 750 AP COMPUTER SCIENCE A

Advanced Placement, 1.0 Credit

Prerequisites: Faculty approval. Successful completion of Javascript with a grade of 93 or above.

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Note: Students taking this course are required to take the AP Exam.



## REQUIRED COURSES

All students are required to take four years (4.0 credits) of Mathematics to meet their graduation requirements. Students are required to have a compass, protractor, and a Texas Instruments TI-84 Plus Calculator.

#### **FRESHMAN YEAR**

811 GEOMETRY Honors, 1.0 Credit

Prerequisites: Administrative placement.

Honors Geometry is designed for students who show high mathematical aptitude and ability and who have already completed Algebra 1. 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.

#### **812 INTEGRATED MATH 1**

Honors, 1.0 Credit

Prerequisites: Administrative placement.

This course is part of a two-part offering where students will complete three years of math content over the course of two years. In Integrated Math 1, students build and strengthen their skills in Algebra 1 for one third of the year, and Geometry topics for the remainder. Algebra 1 topics include the 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. Geometry topics 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.

### 813 ALGEBRA 1 Accelerated, 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.

## 814 ALGEBRA 1

College Preparatory, 1.0 Credit

Prerequisites: Administrative placement.

Algebra 1 is designed for the student who, in comparison with the rest of his class, has more slowly developing math skills. Topics covered are the same as those in Algebra, but the pace and depth of study are adjusted to the needs and abilities of the students in the class. A review of basic arithmetical skills is integrated into the course based on the remedial needs of the student.



## REQUIRED COURSES

### **SOPHOMORE YEAR**

### **821 ALGEBRA 2/TRIGONOMETRY**

Honors, 1.0 Credit

Prerequisites: Department approval. Successful completion of Geometry (Honors) with a grade of 76 or above.

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.

### **822 INTEGRATED MATH 2**

Honors, 1.0 Credit

Prerequisites: Department approval. Successful completion of Integrated Math 1 with a grade of 76 or above.

This course is the second part of a two-part offering where students will complete three years of math content over the course of two years. After successful completion of Integrated Math 1, students complete topics in Geometry and proceed with Algebra 2, taking 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.

823 GEOMETRY Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Algebra 1 (Accelerated) with a grade of 76 or above, or completion of Integrated Math 1 with a grade below 76.

Course topics for Geometry include the study of angle relationships, parallel lines, quadrilaterals, right triangles, congruent and similar polygons, circles, construction and loci, coordinate geometry, the concepts of area and volume, and the study of logic through deductive proof. Practical applications and problem solving are stressed.

#### **824 GEOMETRY**

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Successful completion of Algebra 1 (Accelerated) with a grade of 76 or below, or completion of Algebra 1 (College Preparatory).

Course topics for Geometry include the study of angle relationships, parallel lines, quadrilaterals, right triangles, congruent and similar polygons, circles, construction and loci, coordinate geometry, the concepts of area and volume, and the study of logic through deductive proof. The pace and depth of coverage are adjusted to the needs and abilities of the students in each class. Practical applications and problem solving are stressed.



## REQUIRED COURSES

## **JUNIOR YEAR**

### 831 PRE-CALCULUS/CALCULUS

Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Algebra 2/Trigonometry or Integrated Math 2, with a grade of 93 or above.

Pre-Calculus/Calculus supplements and extends the 821 Algebra 2/Trigonometry 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.

832 PRE-CALCULUS Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of either Algebra 2/Trigonometry with a grade below 76 or Integrated Math 2, with a grade above 76.

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). 872 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.

833 ALGEBRA 2 Accelerated, 1.0 Credit

Prerequisites: Department approval. Successful completion of Algebra 1 (Accelerated) with a grade of 76 or above, or completion of Integrated Math 1 with a grade below a 76.

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.

## 834 ALGEBRA 2

College Preparatory, 1.0 Credit

Prerequisites: Department placement. Successful completion of Algebra 1 (College Preparatory).

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. The pace and depth of coverage are adjusted to the needs and abilities of the students in each class. Practical applications and problem solving are stressed.



## REQUIRED COURSES

## **SENIOR YEAR**

## 841 AP CALCULUS BC

## Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Pre-Calculus/Calculus (Honors) or Pre-Calculus (Honors), with a grade of 93 or above.

AP 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.

Note: Students taking this course are required to take the AP Exam.

## 842 AP CALCULUS AB

Advanced Placement, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Pre-Calculus (Honors) with a grade of 76 or above.

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.

Note: Students taking this course are required to take the AP Exam.

## 843 PRE-CALCULUS

Accelerated, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Algebra 2 Accelerated with a grade of 76 or above.

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. Pre-Calculus also includes an extensive coverage of analytic geometry.

## 844 PRE-CALCULUS

College Preparatory, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Algebra 2 (College Prep).

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. Pre-Calculus also includes an extensive coverage of analytic geometry. The pace and depth of coverage are adjusted to the needs and abilities of the students in each class. Practical applications and problem solving are stressed.



## REQUIRED COURSES

## **SENIOR YEAR (CONT)**

### 845 COLLEGE ALGEBRA

College Preparatory, 1.0 Credit

Prerequisites: Departmental placement. Successful completion of either Algebra 2 (College Prep) or Pre-Calculus (Accelerated or College Prep), with a grade below 76.

Math Analysis prepares the student for college mathematics. After a brief review of the concepts covered in Algebra 2, the students will be studying trigonometry and elementary functions, analytic geometry, complex numbers, and elementary probability.

846 CALCULUS Honors, 1.0 Credit

Prerequisites: Departmental approval. Successful completion of Pre-Calculus (Accelerated) with a grade of 76 or above, or completion of Pre-Calculus(honors) with a grade below 76.

This course provides an introduction to the concepts and applications of differential and integral calculus, but it is less intensive than Calculus AB. The course begins with a review of key Pre-Calculus topics. Students then study many of the topics suggested in the AP Calculus AB syllabus: properties of elementary functions; limits; techniques of differentiation and applications of the derivative; antiderivatives and their application; and the definite integral and its application. The course is intended to provide students with a firm grounding in basic calculus techniques and concepts to enable academic success in a more rigorous college level calculus course.

## **ELECTIVES**

## **OPEN TO JUNIORS**

#### 851 SAT/ACT MATH PREPARATION

Accelerated, 0.5 Credit

Prerequisites: None.

Both ACT and SAT Math Preparation will provide students with the information needed to do well on the Math questions of these tests. In addition to preparing for specific question types on both exams, this course will give students pointers in time management, anxiety relief, scoring, and general standardized test-taking.

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# **HUMAN PERFORMANCE**

## REQUIRED COURSES

All students are required to take a minimum of one half year (0.5 credits) of Fine Arts or Human Performance to meet their graduation requirements.

#### **OPEN TO FRESHMEN**

#### 912 HUMAN PERFORMANCE 1

Accelerated, 0.5 Credit

Prerequisites: None.

The Human Performance 1 course will provide an opportunity for each student to assess his/her fitness level and formulate a personal fitness program. Students' personal fitness programs will include cardiovascular endurance, muscular endurance, muscular strength, and body composition. Through use of Fitness for Life program students will also participate in a variety of personal fitness activities, goal development, and individual and lifelong skill activities. Students will be assessed in the performance and each activity. The instructor will integrate concepts from the principles of exercise, fitness, and health risk behaviors. Students will continue to development of their Personal Learning Portfolios as well as evaluate ways that technology may enhance their physical activity.

## **ELECTIVES**

### **OPEN TO SOPHOMORES**

### 951 WELLNESS

Accelerated, 0.5 Credit

Prerequisites: None.

This course is a comprehensive health course that covers all topics required for the student's health credit. The focus will be on nutrition, mental health, drug/alcohol/tobacco abuse, conflict resolution, human sexuality, communicable diseases, and coping with stress. Students will have the opportunity to initiate a self-evaluation of their own knowledge, attitudes, and behaviors.

### 952 HUMAN PERFORMANCE 2

Accelerated, 0.5 Credit

Prerequisites: Successful completion of Human Performance 1.

The design for Human Performance II provides an opportunity for students to continue their personal development in various fitness components, including cardiovascular endurance, muscular endurance, muscular strength, and body composition. Through continued use of the Fitness for Life program, students will be able to explore their own kinesthetic skill levels, as they relate to agility, balance, coordination, power, and speed, while reinforcing the cognitive progress in relation to physical performance. Students will also participate in a variety of traditional an individual sport and lifelong skill activities.



# **HUMAN PERFORMANCE**

## **ELECTIVES**

## **OPEN TO SOPHOMORES, JUNIORS, & SENIORS**

### 953 RECREATIONAL SPORTS AND FITNESS

Accelerated, 0.5 Credit

Prerequisites: Successful completion of Human Performance 1.

This course is designed for students who desire both indoor and outdoor activities that have a lifetime carry-over value. These activities may include but are not limited to: croquet, horseshoes, badminton, walking, Frisbee, shuffleboard, Ping-Pong, relays, tennis, and bocce ball. In addition, fitness-based activities including snowshoeing, hiking, cycling in cross country will also be introduced. These activities will contribute to the student's well-being and provide knowledge of benefits of maintaining a healthy and active lifestyle. Students will learn a variety of tournament structures. Understanding in evaluating physical activity for social interaction enjoyment are key components of this course.

954 YOGA Accelerated, 0.5 Credit

Prerequisites: None

Yoga is a course designed for all students regardless of their experience. The focus is to explore all facets of yoga, beginning with the 5 branches of yoga. Eastern lessons on asanas, pranayama, meditation, and chakras preface deeper exploration into the many styles of western yoga. Styles include Hatha, Vinyasa, Power, Ashtanga, Bikram, Iyengar, Yin and Restorative yoga practices. Course goals include increasing physical fitness, as well as the teaching of self-compassion and self-confidence, development of a mind/body connection aiding in emotional balance and positivity, as well as providing tools to help fight depression and stress, and to help to aid focus.