

CURRICULUM GUIDE 2019-2020

UPPER SCHOOL



Wilbraham & Monson Academy is a transformational experience where students become challenge-seeking citizens and leaders of an evolving world.

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In a diverse, rigorous and caring environment, the Upper School promotes the intellectual, social and physical growth of adolescents. Students broaden their academic development as they prepare for the challenges of higher education and for success as compassionate, challenge-seeking global citizens and leaders in an increasingly interdependent world.

DIPLOMA REQUIREMENTS

We require a total of 57 credits for graduation, 42 of which are to be earned from our core requirements across six disciplines: English, Mathematics, Science, History, World Languages and Fine & Performing Arts. The remaining 15 elective credits allow students to further strengthen their academic preparation for college, pursue personal passions and interests, as well as meet college-specific requirements. Equivalent transfer credits from other schools will be evaluated on an individual basis.

English (12 credits)

Students must be enrolled in English every trimester. Successful completion of grade level English in each of the four years is required – one full-year course or three electives for Grade 12. Seniors taking electives must take Writing Seminar and/or Research & Writing along with other English electives to equal three credits. ESL students will be placed in appropriate courses through Grade 12.

Mathematics (9 credits)

Three years of mathematics are required, including successful completion of Algebra 1, Geometry and Algebra 2. All students take mathematics through Grade 11. Many colleges may require mathematics through Grade 12.

CEGS (6 credits)

Center for Entrepreneurial & Global Studies

These courses are equivalent to social science credits. Two years of CEGS courses are required, including World History in Grade 9 and U.S. History in Grade 11. International students may be placed in U.S. History for ESL Students to fulfill their U.S. History requirement. Many colleges may require at least three years of social sciences.

Science (6 credits)

Two years of laboratory science are required. STEM 9 Physics is required of all students in Grade 9. Many colleges may require at least three years of laboratory science.

World Languages (6 credits)

Two years of the same language are required. Students must meet department requirements before advancing to the next level within a language. Many colleges may require three or four years of the same language.

Fine & Performing Arts (3 credits)

Three credits in the Fine & Performing Arts are required. Three trimester electives or one yearlong class can meet this requirement. It is recommended that students work to meet their Fine & Performing Arts requirement early in their time at WMA to allow flexibility for AP courses and special interest electives in Grades 11 and 12.

Additional Diploma Requirements

- All Grade 9 students are required to take Freshman Foundations.
- All Grade 11 students are required to take Health 11.
- Students are enrolled at the Academy throughout the senior or postgraduate year and participate in Commencement.
- Seniors and postgraduates must pass the equivalent of five yearlong courses.
- All students must successfully complete the afternoon requirement as stated in the Afternoon Program section of the Student/Parent Handbook.
- All students must complete the Community Enrichment obligation as outlined in the Student/Parent Handbook.

Postgraduate Students

In order to be eligible for our diploma, postgraduates are required to take:

- One English elective each trimester - one course must be Writing Seminar or Research & Writing
- An appropriate mathematics course
- A yearlong course in science, world languages or CEGS
- Two additional yearlong courses (or a combination of three trimester courses) in CEGS, mathematics, science, world languages or fine & performing arts

Postgraduates who elect not to follow the above course of study are eligible to receive a Certificate of Attendance from the Academy.



Course Load Requirements

Upper School students are required to take five courses each trimester. Students are permitted to take six courses if they wish. Students are discouraged from taking seven courses in a trimester due to the intensity and time commitment required. A student wishing to exceed six courses in a trimester must be in communication with the Dean of Studies.

Course Selection Process

Returning students meet with advisors in the spring trimester to review and make course selections for the coming year. Parents are welcomed and encouraged to contact their child's advisor to discuss course selections. Course selection should be completed in early May.

Newly-enrolled students will receive registration information directly from the Dean of Studies office in May. Families are encouraged to communicate with the Dean of Studies to determine appropriate course selections. Placement testing may be required prior to finalization of a schedule.

The Dean of Studies office will review each student's program to ensure adequate progress toward graduation requirements.

Thoughtful and careful attention to your course selection will help us to best meet students' needs. It is difficult and many times impossible to accommodate changes after teaching assignments, class placements and class sizes have been determined. Accurate student course requests become the basis of a successful schedule for the coming year.

Please note: While the Dean of Studies makes every effort to schedule students in requested courses, the master schedule may prohibit some course combinations.

All student schedules are considered tentative until the opening of school.



Grading System

Faculty members assess student academic performance by assigning the following grades: A, B, C, D and F with plus and minus notations when appropriate. The numerical equivalents of each letter grade are listed below.

Letter Grades	Numerical Equivalents
A+	100, 99, 98, 97
A	96, 95, 94, 93
A-	92, 91, 90
B+	89, 88, 87
B	86, 85, 84, 83
B-	82, 81, 80
C+	79, 78, 77
C	76, 75, 74, 73
C-	72, 71, 70
D+	69, 68, 67
D	66, 65, 64, 63
D-	62, 61, 60
F	59 and below

Incomplete Grades

Incomplete grades may only be assigned when a student has been absent for an approved reason and was unable to complete work by the end of the particular marking period. Students should work with teachers to clear incompletes in a timely manner. Students with incomplete grades in any course will not be included in Honor Roll.

Academic Honors

Lists of students earning Honors, High Honors, and Highest Honors are published on the Academy's website at the end of each trimester. A student must earn a grade point average of 3.30 to be eligible for Honors, 3.70 for High Honors, and 4.00 for Highest Honors. A student may not have a grade below a C and must take at least five credits throughout the trimester to be eligible for academic honors.

Grade	Regular	Honors/AP
A+	4.33	4.67
A	4.00	4.33
A-	3.67	4.00
B+	3.33	3.67
B	3.00	3.33
B-	2.67	3.00
C+	2.33	2.67
C	2.00	2.33
C-	1.67	2.00
D+	1.33	1.67
D	1.00	1.33
D-	0.67	1.00
F	0	0

AP PROGRAM

Students seeking a rigorous academic experience with college-level coursework may enroll in Advanced Placement (AP) courses and prepare to take the Advanced Placement exams in the spring, which are mandatory for each course. Students enrolling in AP courses must meet department criteria and be recommended by their teacher. Advanced Placement classes have demanding curricula in which teachers must set high expectations and move at an accelerated pace in order to cover the breadth of material and properly prepare students for the AP Exam. Students must be actively engaged learners and have a high level of personal responsibility in order to keep pace with AP classes. **Please note:** Fees are charged for each exam taken.

Due to the intensity and high expectations of AP courses at WMA, students considering AP enrollment must work closely with their academic advisor, the College Counseling Office and the Dean of Studies to find the appropriate course load balance. WMA recommends that students keep enrollment to a maximum of three AP courses per year; however, students can petition the Dean of Studies to request more than three in one year. We offer 23 AP courses approved by the College Board:

AP Biology	AP European History - Online	AP Seminar (AP Capstone yr. 1)
AP Calculus AB	AP French	AP Spanish
AP Calculus BC	AP Human Geography	AP Statistics
AP Chemistry	AP Latin	AP Studio Art: 2D Design
AP Computer Science A - Online	AP Macroeconomics	AP Studio Art: 3D Design
AP English Language & Composition	AP Music Theory <i>may be offered online</i>	AP United States History
AP English Literature & Composition	AP Physics	AP World History
AP Environmental Science	AP Research (AP Capstone yr. 2)	

AP CAPSTONE™

AP Capstone™ is an innovative diploma program from the College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone™ is built on the foundation of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses. In AP Seminar, students investigate real-world issues from multiple perspectives, gathering and analyzing information from various sources in order to develop credible and valid evidence-based arguments. In AP Research, students cultivate the skills and discipline necessary to conduct independent research in order to produce and defend a scholarly academic paper. AP exam fees apply to these courses. Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP exams of their choosing will receive the AP Capstone Diploma. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate. AP Seminar may also be taken as a stand-alone option. Department approval is required.

AP Seminar (3 credits) Year 1 of 2-year AP Capstone Program

Offered to Grades 10 and 11, may be taken for English credit or CEGS credit

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students will explore issues of global diplomacy in the way it traditionally appears (government to government) as well as how it is evolving in the current age. Students will research and contemplate such topics as public diplomacy (the way governments influence populations of other countries); digital diplomacy and the role of NGOs (e.g. Red Cross, Doctors without Borders); and private and supranational diplomatic organizations (e.g. the United Nations, the European Union) through the lens of existing hotspots around the world today.

See complete course description in the English Department listing

AP Research (3 credits) – Year 2 of 2-year AP Capstone Program

Offered to Grades 11 and 12, may be taken for English or department credit can be assigned to align with research subject area, pending permission from department chair and Dean of Studies. Students are encouraged to take in conjunction with another AP course related to their topic.

AP Research allows students to deeply explore an academic topic, problem or issue of individual interest. Through this exploration, students design, plan and conduct a yearlong research-based investigation to address a research question. In the AP Research course, students further develop the skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4,000–5,000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

See complete course description in the English Department listing

WMA ONLINE PROGRAM

WMA offers several online courses through Virtual High School to enhance our on campus offerings. Students enrolled in these courses may be assigned an "online learning block" in their daily schedule with a WMA faculty coordinator to oversee their progress, take attendance and offer support. Thus, offering students a guided yet independent learning experience. Students should be aware that these courses are challenging and require self-motivation, good organizational skills and a substantial time commitment. Students taking courses through Virtual High School will be expected to work according to the VHS schedule, which does not follow the WMA vacation schedule. Course work will need to be submitted regardless of the WMA vacation schedule. There are fees associated with these courses. All online courses will receive WMA transcript credit.

AP European History (3 Credits) – Virtual High School – Full Year Course

Level: Grade 10 and above. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Global Studies 1 and department permission required

Overview: During this full-year course, students will investigate the broad themes of interaction between Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and the Individual and Society, while making crucial connections across four different chronological periods ranging from 1450 to the present. The challenging and stimulating curriculum requires much more time than other high school courses. This course specifically encourages the development of students' skills in the categories of chronological reasoning, comparison and contextualization, construction of evidence-based arguments, and interpretation and synthesis of historical narratives.

Please see full course description in CEGS section

Java Programming (1.5 Credits) – Virtual High School

15-week course

Level: Grade 10 and above

Prerequisite: One year of Algebra and department permission

Overview: This course is an introduction to Computer Science, covering the basic concepts and elements of the Java programming language and introducing object-oriented programming. Students will gain experience in writing programs that are well documented according to industry standards and will have the opportunity to create Java Applets and learn about Graphical User Interface programming with Swing.

Please see full course description in Computer Science section

AP Computer Science A (3 Credits) – Virtual High School – Full Year Course

Level: Grade 10 and above. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Java Programming, Mobile Computer Science Principles and Department approval

Overview: AP[®] Computer Science is a course designed to awaken and support students' problem-solving skills. The course will introduce the Java programming language while emphasizing universal language techniques like syntax, semantics and readability. Students will gain mastery in programming concepts by using a subset of Java features that are covered when needed throughout the course content. This allows the student to understand and master important concepts that will apply to programming problems in many additional languages.

Please see full course description in Computer Science section

AP Music Theory (3 Credits) – Virtual High School – Full Year Course

Level: Advanced Placement - The AP Music Theory exam in May is required.

Prerequisites: Proficiency in playing major and minor scales, reading basic tonal melodies, and using proper technique on one or more musical instruments (vocal, orchestral or band). Strongly Recommended: At least one semester of practice writing traditional music notation with proper technique. At least one semester of keyboard instruction, including scales and triad formation. This course has VHS fees.

Overview: This course is designed to give the student an understanding of music theory, sight-reading, and aural skills that is equivalent to that of a first-year college music student. It is also designed with the explicit purpose of preparing the student for the AP[®] Exam in Music Theory.

Please see full course description in Fine and Performing Arts section

Courses may vary depending on demand. Students taking courses through Virtual High School will be expected to work according to the VHS schedule. Course work will need to be done regardless of the WMA vacation schedule.

The WMA English department offers a curriculum that merges the best writings of the Western tradition with contemporary global literature, creating a comparative approach. Students are encouraged to consider the themes of canonical works, frame them within a global context and explore how they might speak to today's global concerns. The goal of the English Department is to expand students' horizons by introducing them to the world's best writing in fiction, poetry, drama and all forms of nonfiction. A major aim of the program is to develop critical and creative thinkers who see beyond cultural stereotypes and biases. Our program focuses intensely on writing and our progression offers students mastery of the tools needed to structure and write a compelling analytical and argumentative paper. The English department encourages collaboration through daily discussion of the texts. This Socratic approach fosters dialogue and debate, which in turn strengthens verbal skills. The art of rhetoric is also introduced and public speaking is a component in each grade level course. Seminar-style classes oblige students to be prepared, engaged and ready to participate fully in class discussion. An intensive focus on process writing ensures that students are well prepared for the rigors of college. All courses are full year worth three credits unless otherwise indicated. Typical course progression options are listed below. Please see complete descriptions for more information.

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
English 9 Honors English 9 Advanced ESL Superior ESL	English 10 Honors English 10 AP Seminar Advanced ESL Superior ESL	American Literature AP Seminar AP Research AP Language & Composition Superior ESL	AP Language & Composition AP Literature & Composition AP Research Trimester English Electives

English 9

Level: Grade 9 and select international students

Prerequisite: Incoming International students require approval of the ESL and English departments

Overview: Thematically, this course explores the relationship of citizen and leader within a global framework. The program is designed to introduce students to the different genres of literature as well as the structural approach to the English classroom at the Academy. The course aims to promote and engender a love of reading and writing, and the enjoyment of discourse; to give students a chance to explore their creative and analytical voices; and to focus on communication and analysis of ideas. Reading for class is presented as an active exercise, a conversation between reader and text with annotation required. Assigned texts include a balance of the traditional Western Canon and an introduction to global literature, including (but not limited to): *The Lord of the Flies*, *Metamorphoses*, *The Odyssey* and *Macbeth*. Students explore mythology through reading and research, but the culmination of the unit is a group film project on a selected myth. The student films are presented at an all-English 9 screening, where the student work is judged and awards (called the Ovids) are presented. Students are also introduced to poetry and memoir, and explore these genres through their own creative writing. Throughout the year, students develop familiarity and mastery of the five-paragraph analytical essay and thesis writing. Grammar and writing instruction are incorporated into the curriculum as specific units but the teaching of writing mechanics is also integrated into the process writing approach that is a component of all writing assignments. Assessments include: major literary analysis papers and creative writing assignments; student responses to the literature; daily class discussions; reading quizzes; grammar worksheets; the Ovid film project; and a cumulative final exam.

Honors English 9

Level: Grade 9

Prerequisite: English teacher recommendation and department approval.

Overview: This honors level course is designed for the student who has strong reading comprehension skills and excellent writing skills, including mastery of the five-paragraph essay. Students in this course are expected to complete all reading and writing assignments at an accelerated pace, have strong annotation skills and participate in class discussion daily. A love of reading and a deep appreciation for the elements of literature are essential. The curriculum will follow the major units embedded in English 9 but students will be given ancillary texts to help shape their understanding of the major texts covered. Grammar concepts will be reviewed and reinforced more within the context of the students' own writing. Assigned texts include *The Lord of the Flies*, *The Metamorphosis*, *The Odyssey* and *Macbeth*, in addition to poetry and short stories units. Students will also study a unit on rhetoric, which will align with the skill sets needed for either Honors English 10 or AP Seminar. Students will be required to write critical essays after each unit, in addition to quizzes, tests and creative projects. Students will also participate in the Grade 9 winter film project to culminate their studies of mythology.

English 10

Level: Grade 10 and select international students

Prerequisite: Grade 9 English course, or approval of the ESL and English departments

Overview: The learning theme of English 10 is the complications of leadership across global, historical and cultural perspectives. The objective of the course is to provide a robust reading and writing experience whereby students analyze and consider texts connected by the search for individual meaning and responsibility within a broader society. Reading assignments include *Fahrenheit 451*, *Night*, *The Crucible*, *Frankenstein* and a selected Shakespeare play (recent examples are *Julius Caesar*, *Henry V* and *A Midsummer Night's Dream*). The course also includes a major poetry unit that culminates in our annual Poetry Out Loud recitation contest. Class discussions and writing assignments are based on these texts and supplemented with grammar instruction and preparation for the SAT. They will also work to build solid critical reading skills and acquire the process of analytical writing through classroom discussion and regularly scheduled thesis-driven papers. Assessments include: daily class discussions; weekly grammar, vocabulary, and reading quizzes; literary analysis assignments; and a cumulative final exam.

Honors English 10

Level: Grade 10 and select grade 11 students

Prerequisite: Grade 9 English course and departmental permission

Overview: This honors level course is designed to prepare students for the rigors of AP Language & Composition or AP Seminar in their junior year. Students are expected to complete reading and writing assignments at an accelerated pace and participate in class discussions on a deeper level. Students also read ancillary texts in conjunction with each major work studied to further their understanding of historical context and global perspectives. Students explore contextual relevance of the texts to individual and world perspectives; examine character and plot in the context of global themes; expand their understanding of global cultures; and compare/contrast literature from various historical and global settings with the aim of achieving a greater understanding of these works as they apply to the students' world today. Assigned texts include *Fahrenheit 451*, *Night*, *Things Fall Apart*, *The Woman Warrior*, *Frankenstein*, *Antigone* and a play by William Shakespeare (recent examples include *Julius Caesar*, *A Midsummer Night's Dream*, and *The Comedy of Errors*). The poetry unit culminates in our annual Poetry Out Loud recitation contest. The writing goals of this course are to: expand upon the five-paragraph, analytical, thesis-driven essay form; introduce the concepts of rhetoric; and put these into practice in essays that take a position and support it. Assessments include daily participation in discussion, regular reading and annotation checks, formal literary analysis essays and related assignments, argumentative essays and a final exam.

AP Seminar - Year 1 of 2-year AP Capstone Program

Level: Advanced Placement, Grades 10, 11, 12, may be taken for English credit or CEGS credit. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Departmental permission

Overview: AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students will explore issues of global diplomacy in the way it traditionally appears (government to government) as well as how it is evolving in the current age. Students will research and contemplate such topics as public diplomacy (the way governments influence populations of other countries), digital diplomacy, and the role of NGOs (e.g. Red Cross, Doctors without Borders) and private and supranational diplomatic organizations (e.g. the United Nations, the European Union) through the lens of existing hotspots around the world today. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literary and philosophical texts. They also listen to and view speeches, broadcasts, and personal accounts; and they experience artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations – both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

American Literature

Level: Grade 11, select Grade 12 students

Prerequisite: English 10 or approval of the ESL and English departments

Overview: This American literature survey course introduces students to the best of the American writing tradition, including iconic works such as *The Great Gatsby*. These classics are often paired with contemporary works such as *The Kite Runner*, *Sula* and *The Things They Carried*. Course reading also includes short stories, poetry and essays. Students engage in intensive reading of the literature and focus on developing their critical reading and writing ability. Students write several analytical essays and complete assignments in a variety of other forms: personal, creative, expository, argumentative and research. Process writing –

brainstorming, outlining, drafting, revising, editing – of each major paper assignment is expected. The goal is to have students expand upon the five-paragraph essay format and develop clear, economical and honest style in their prose. Instruction is given on elements of essay structure, syntax, grammar and MLA formatting. Teacher conferences are an important component of this writing program. Assessments include: five to seven major writing assignments, as well as journals and process writing assignments; regular quizzes on the reading and tests following each major reading unit; and a final exam. Daily class participation is expected, and participation is graded based on class preparation and engagement in class discussion. The third trimester will also include a short grammar and writing mechanics review in preparation for students taking the ACTs and SATs, as well as a unit on the personal essay in preparation for the Common Application personal essay students will have to write senior year.

AP English Language & Composition

Level: Advanced Placement, Grades 11 and 12. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Departmental permission

Overview: The goal of this course is to develop students' writing and reading skills to a college level and prepare students for the Advanced Placement English Language and Composition exam in the spring. Students read and carefully analyze a broad and challenging range of nonfiction (and some fiction) prose selections. The major text for this course is *The Bedford Reader*, which will be supplemented with handouts. Students will also read American literary works such as *The Great Gatsby*, *The Awakening*, *The Scarlet Letter* and *The Glass Castle*. Writing is examined using the template of Aristotle's definition of the rhetorical situation, as well as a SOAPSTONE approach. Writing assignments include literary analyses, memoir, creative writing, argumentative and synthesis essays, editorials, press releases and journals. Students keep a journal comprised of informal, unpolished responses to the assigned readings and write in class each week, including timed impromptus. Individual and group exercises focus on discovery, organization, thesis development and argument development. Teacher conferences are not scheduled but highly encouraged. The third trimester will also include a short grammar and writing mechanics review in preparation for students taking the ACT and SAT, as well as a unit on the personal essay in preparation for the Common Application personal essay students will have to write senior year.

AP English Literature & Composition

Level: Advanced Placement, Grade 12 or postgraduate. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Departmental permission

Overview: The goal of this course is to prepare students for the Advanced Placement Literature & Composition exam. Students will be immersed in significant texts from the British and American traditions. Through close-reading techniques and critical writing assignments, students will learn how to analyze literature at a complex level and contemplate the author's intention. Students will also identify the power of literature to shape the world while reflecting on the historical and social values of such works. Classics of the Western Canon are paired with contemporary global voices in order to spark dialogue and explore the intersection of the traditional and the new. Students will consider how themes of identity in *Jane Eyre* compare with Junot Diaz's *The Brief Wondrous Life of Oscar Wao*; or how the complications of race and bigotry in *Othello* compare to the modern story of *The Reluctant Fundamentalist*. Other works assigned include various short stories, and an extensive poetry unit that covers Shakespeare's sonnets and the Romantics. Students will engage in major literary analysis and critical writing assignments — both long format and short essays — and are required to conference with the teacher frequently. A literary research paper will also be completed. Online class discussion board postings and various creative writing exercises will also be assigned to generate a deeper appreciation of literature and literary elements.

AP Research – Year 2 of 2-year AP Capstone Program

Level: Advanced Placement, Grade 11 or 12. May be taken for English or department credit can be assigned to align with research subject area, pending permission from department chair/Dean of Studies. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: AP Seminar and permission

Overview: AP Research allows students to deeply explore an academic topic, problem or issue of individual interest. Through this exploration, students design, plan and conduct a yearlong research-based investigation to address a research question. In the AP Research course, students further develop the skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing and synthesizing information as they address a research question. Students explore their skill development, document their processes and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4,000–5,000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense. Students are encouraged to take this in conjunction with another AP course related to their topic.

SENIOR ENGLISH TRIMESTER COURSES

Seniors and postgraduates not enrolled in a full year English course are required to take three English electives during the course of their last year at WMA, one each trimester. To prepare for college-level writing, they must enroll in at least one writing-intensive trimester course — either Research & Writing or Writing Seminar — in order to graduate. Seniors and PGs should balance their writing coursework with at least one literature-based elective, and should not take more than two writing courses during the year. **There are no prerequisites and each course earns one credit.**

WRITING ELECTIVES

Research & Writing (graduation requirement option)

Trimester

Level: Grade 12 or postgraduate. Approved for NCAA credit.

Overview: This course is designed to help students acquire the skills necessary to produce a 15-page research paper while learning the spirit of inquiry and curiosity, and following the research process from idea to finished essay. Students will be expected to choose a topic of global importance, research it, evaluate materials, communicate abstract ideas clearly and successfully; create a podcast; and write an annotated bibliography. Related assignments are designed to build research and writing skills. Independent work and initiative are expected. The faculty role is to provide guidance and hands-on instruction for each step of the research and writing process. Students will be assessed throughout the process.

Writing Seminar (graduation requirement option)

Trimester

Level: Grade 12 and postgraduate. Approved for NCAA credit.

Overview: The goal of this course is to improve the writer's style, structure and voice, and to hone critical and analytical writing skills. Students prepare for writing at the college level by learning the three-step writing process and developing a personal writing style. Students will consider form, structure, style and use of rhetorical tools. Students will also read model essays and engage in discussion of content and meaning through analysis. Students will produce a variety of essays (3-5 pages in length) including personal, expository, and descriptive pieces, as well as the personal essay for the Common Application to colleges. This course will review the five-paragraph essay format and then move to longer format essay prompts, with an emphasis on refinement of thesis statements. Students will write daily and conference with the teacher in the computer lab where they will draft and edit work. Students will produce a final project: a 5-7 page thesis-driven research paper using MLA formatting and documentation standards. Additional assessments include four to five long-format essays in various genres.

Creative Nonfiction

Trimester

Level: Grade 12, postgraduate or select underclassmen. Approved for NCAA credit.

Overview: This course offers students the opportunity to investigate what writer Philip Lopate calls “the stomach growls of life.” Through their own personal writing and exposure to a variety of forms and techniques, students will begin to develop their own “voice,” think deeply on a wide variety of topics, and learn to engage different audiences. Students will tell their own stories and step outside of their comfort zones to do so. Students will develop critical judgment of their own writing and that of others; understand the expectations of college-level writing; grow in confidence and view writing as a skill that can be developed. Assignments include four personal essays 3-4 pages in length, utilizing process-writing steps for brainstorming and drafting, culminating in a final essay. During the course, students will analyze a series of essays from contemporary authors to learn and incorporate stylistic techniques into their own writing. Students will also share pieces of their work aloud with their classmates. They are expected to turn in a cover letter with most of their essays in which they will discuss their own writing and justify their choices.

Public Speaking and Rhetoric

Trimester

Level: Grade 12, postgraduate or select underclassmen.

Overview: This course will begin as a traditional introduction to public speaking, discovering and drawing upon necessary skills to achieve confidence and clarity in anything from a class presentation to a speech in front of a large audience. We will work on vocal technique and stamina, physical presence, and overcoming stage fright. Students will read and analyze famous historic and contemporary speeches and will learn about the rhetorical strategies employed in any strong speech. Students will write short speeches and a long format speech, presented in the school chapel in front of an audience, will conclude the term.

Global Literature: Novels

Trimester

Level: Grade 12, postgraduates and select underclassmen. Approved for NCAA credit.

Overview: This course is designed to provide students with insight into global issues by exposing them to a number of literary voices. Through the lens of literature, the course will help students learn about physical, political and human geographies. Protagonists from different countries and cultures provide us with a way of connecting with people whose motivations may be very different from our own, providing a window into other cultures and backgrounds. The course will also investigate different cultures along with the choices and consequences of emigration, and the continuing impacts of colonialism. Recent texts include: Adiga's *White Tiger*, Herrera's *Signs Preceding the End of the World* and Hamid's *The Reluctant Fundamentalist*, as well as assorted essays and short stories. Through intensive reading, analysis and discussion of these texts, the class will investigate various universal themes and their historical context. Students will also use outside materials to learn about the history and politics of the unique settings of each of these novels. In addition to reading tests and quizzes, course assessments include several literary analysis essays and short research projects.

Short Stories: Environmental Literature

Trimester

Level: Grade 12, postgraduate or select underclassmen. Approved for NCAA credit.

Overview: This course will be an introduction to environmental literature. Students will read and analyze various works of literature from both American and international authors exploring humanity's relationship to the environment and how that has changed over the years. There will also be the opportunity for fieldwork in creative writing about the natural world - both fiction and nonfiction. Students will also read works by nature writers, meet and talk to some local nature writers and natural scientists, and explore some of the issues that are inherent in writing about the natural world. Readings will include stories by Henry David Thoreau, Jack London, Jean Giono, Ernest Hemingway, Steven Crane, Annie Dillard, Rachel Carson, Barbara Kingsolver, Tommy Orange and Vandana Shiva, in addition to various poems and essays.

Womens' Literature

Trimester

Level: Grade 12, postgraduate or select underclassmen. Approved for NCAA credit.

Overview: In this course, students will be introduced to the history, traditions, and forms of literature written by and about women. Students will also examine the effects of gender on literature and consider how gender intersects with race, ethnicity, class, sexual orientation and other factors in shaping identity. They will also consider the multiple ways women have responded to being silenced throughout history. They will explore a rich and diverse range of writers and works to identify the recurrent images, themes, and styles of an evolving canon. Recent texts include *Wide Sargasso Sea* by Jean Rhys and *Persepolis* by Marjane Satrapi. Students will read various short stories and poetry by female authors.

Shakespeare: Critical Analysis and Performance

Trimester

Level: Grade 12, postgraduate

Overview: Students in this course will study at least two of Shakespeare's major plays and his poetry. Textual analysis will culminate in at least two analytical essays. Our approach will be to acquaint ourselves with Shakespeare as he is meant to be experienced, through performance. To this end, the class will spend a portion of the trimester focusing on performance techniques and ending in a final graded performance. Possible texts include *A Midsummer Night's Dream*, *Hamlet*, *Troilus and Cressida* and Shakespeare's sonnets.

Meditation and Literature

Trimester

Level: Grade 12, postgraduate or select underclassmen

Overview: Meditations in Literature is an introduction to mindfulness and meditation through both practice and study. A growing trend in the West, mindfulness and meditation have proven benefits applicable to the modern day, which have been enjoyed in other parts of the world for millennia. By introducing students to literature, history, concepts and foundational practices (each class will feature a 10 to 20-minute guided meditation), meditation will become demystified, and students will gain insight and first-hand knowledge of one of the world's oldest insight and wellness practices. Meditation and mindfulness will be supplemented with the study of the ideas, concepts and experience of mindfulness, as told by some of literature's most prominent voices. Major readings will include *Mindfulness in Plain English* by Bhante Gunaratana, *Eat, Pray, Love* by Elizabeth Gilbert and *Siddhartha* by Hermann Hesse, as well as selections from Deepak Chopra, Ram Dass, Henry David Thoreau, Ralph Waldo Emerson, Anne Lamott, David Foster Wallace, Mary Oliver, Walt Whitman, Rupi Kaur, Jack Kornfield and Sharon Salzberg. Throughout the trimester, students will partake in daily discussions, complete weekly written reflections, and produce two long-format critical essays, among other formal assessments.

ENGLISH ELECTIVES

Journalism

Full Year (1 credit)

Level: Open to all grade levels. Course does not count as an English course.

Prerequisite: departmental permission

Overview: This course meets one evening per week to create Wilbraham & Monson Academy's student newspaper, *The Atlas*. Students learn basic journalistic skills: interviewing, headline writing, news reporting and writing a news or feature article. For each issue, students meet with a senior editor or the faculty advisor in a story conference, assist with production of the newspaper (including proofreading) and write (or participate in the writing of) an article or feature story. One class each month serves as an editorial board meeting to determine the content of the upcoming issue and make assignments. A second class each month will focus on production of the current issue of the newspaper. The goal of this course is to produce a quality school newspaper while learning to write grammatically correct and stylistically solid editorial copy for news, editorial, feature and sports articles. Students will learn proper journalistic standards, ideals, and ethics, and will utilize technology to do layout, copy-editing, headline writing and more.

Novel Writing Seminar

Full Year (2 Credits)

Level: Open to all grade levels. Course does not count as an English course.

Prerequisite: Instructor review of 1,000-2,000 word creative writing submission, as well as Deans Office and Department Chair approval.

Overview: Students will take their first leap toward becoming the next Mark Twain, J.K. Rowling, Ernest Hemingway or Agatha Christie as they work toward publishing their first novel. Students will meet once a week in a classroom setting, once a week with the instructor for a one-on-one session, and once a month as a group in a Writers' Conference format. The first trimester will be spent working on the foundation of building a story: storyline, character building and point of view, as well as weekly assignments to enhance the writer's creative spirit and grammar skills. Students will then begin writing their novels, with assigned weekly word counts methodically advancing the writers toward their goal. The first drafts, which will include roughly 25,000 words, will be completed by early March. The novels will be refined in April, printed in early May, and a book reading will be held prior to the end of school. This course will count for 2 credits, and may not be taken in lieu of a yearlong English class. *Small class fee for publication may be incurred.

WRITING ENHANCEMENT

Students needing additional writing experience and International students moving into mainstream English may be assigned to the following class to strengthen writing skills in addition to English class:

Writing Workshop

Two Trimesters (2 credits)

Level: Intermediate; Writing Workshop assists students in need of additional writing experience

Prerequisite: Teacher or department recommendation. Required if recommended

Overview: Through a collaborative environment, students learn the skills necessary to develop an effective planning, writing, and revision process. Ongoing revision of a digital writing portfolio allows students to develop and apply an array of writing techniques to a variety of writing forms; increase organization; and learn to use more sophisticated expression, word choice, and advanced grammatical structures. This course is offered in addition to a student's traditional English class and focuses on the student's individual writing needs.

ENGLISH AS A SECOND LANGUAGE (ESL)

The goal of the ESL program is to assist English language learners to increase their fluency, comprehension and confidence in English, so they are able to use it comfortably and effectively in both academic and social situations. Students are prepared for the increased level of difficulty and quantity of reading and writing that is expected of them in traditional English classes. Based on application materials and the results of the English placement tests taken by international students when they arrive on campus, students are placed either in traditional English classes or in one of two ESL programs. Those students who take ESL usually also take U.S. History for International Students. Students placed in traditional English classes may also be recommended for Writing Workshop, based on their demonstrated writing ability. Outside support for all international students is also available through individual meetings with ESL teachers and a trained staff of Writing Center student tutors.

ADVANCED ENGLISH AS A SECOND LANGUAGE PROGRAM

Advanced English as a Second Language is a two-class program providing a transition to either Superior ESL or traditional English classes. A student in Advanced ESL will take two ESL classes each day, one in Language and Structure, the other in Literature and Analysis. Prerequisite: Department recommendation.

Advanced ESL: Language and Structure

Level: Grades 9, 10, or 11

Prerequisite: Department recommendation

Overview: Students will develop an understanding of advanced grammatical structure; an appreciation of the process, forms and genres of writing; an increased oral fluency; and a sophisticated active academic vocabulary. This will be achieved by using a balanced curriculum in the four essentials of language mastery – reading, writing, listening and speaking. Throughout this course, students will complete exercises in grammar, writing and vocabulary workbooks; write journal entries and creative nonfiction; perform daily conversational speaking and formal public speaking using multimedia presentations; conduct critical reading of nonfiction; and carry out authentic listening activities. Students are assessed on grammar and vocabulary assignments, tests, writing, oral presentations and class participation. Texts utilized include *Longman Academic Writing Series Level 3*, a variety of nonfiction, as well as other outside sources.

Advanced ESL: Literature and Analysis

Level: Grades 9, 10, or 11

Overview: ESL Literature and Analysis provides a balanced curriculum in the four essentials of language mastery – reading, writing, listening and speaking – through the study of literature. The purpose of this class is to enable students to study literature critically and excel in a mainstream classroom with fluent speakers, readers and writers of English. Students develop and strengthen critical comprehension of literature through the study of short stories, novels and poetry. They write personal responses, creative pieces, critical essays and revise their writing often. Students participate in a variety of speaking and listening activities including class discussion, group work and oral presentations. Vocabulary development is integral to the course, and lists are individually and teacher generated from the literature studied. Students improve basic and advanced grammar through their writing in this course. Assessments include writing assignments, literature tests, vocabulary quizzes and class participation. Texts may include but are not limited to *Discovering Fiction 1*, *Monster* by Walter Dean Myers, *A Long Walk to Water* by Linda Sue Park, *Of Mice and Men* by John Steinbeck and a variety of poetry.

SUPERIOR ENGLISH AS A SECOND LANGUAGE PROGRAM

Superior English as a Second Language is a two-class program providing a transition between ESL and traditional English classes. A student in Superior ESL will take two ESL classes each day, one in Language and Structure and the other in Literature and Analysis. Superior ESL provides an increase in the quantity of reading and writing, as well as raises the level of difficulty of reading and expectations of writing.

Prerequisite: department recommendation

Superior ESL: Language and Structure

Level: Grades 9, 10 or 11

Overview: Students will expand and solidify the use of advanced grammatical structure, and the process, organization and forms of writing in English. Students will further advance their oral fluency, and further develop and refine active academic vocabulary. This will be achieved by using a balanced curriculum in the four essentials of language mastery – reading, writing, listening and speaking. Throughout this course, students will complete exercises in grammar, writing and vocabulary workbooks; write journal entries and creative nonfiction; perform daily conversational speaking and formal public speaking using multimedia presentations; conduct critical reading of nonfiction; and carry out authentic listening activities. Students are assessed on grammar and vocabulary assignments, tests, writing, oral presentations and class participation. Texts include Longman Academic Writing Series Level 4 and a variety of news articles and essays, as well as other outside sources.

Superior ESL: Literature and Analysis

Level: Grades 9, 10 or 11

Overview: Students will expand and solidify critical reading comprehension, academic and creative writing skills, listening and speaking skills needed for discussion-based classrooms, and further develop an active vocabulary of everyday and literary terms. This will be achieved by using a balanced curriculum in the four essentials of language mastery – reading, writing, listening and speaking – through the study of American literature. Students will participate in a variety of speaking and listening activities, including class discussion, group work and oral presentations. Writing assignments include personal responses, descriptive and creative pieces, and critical essays, as well as frequent revision. Vocabulary lists are individually generated. Students improve advanced grammar through their writing in this course. Assessments include writing assignments, tests, quizzes, and class participation. Texts may include but are not limited to *Discovering Fiction 2*, *The Outsiders* by S. E. Hinton, *All American Boys* by Jason Reynolds and Brendan Kiely, *The Giver* by Lois Lowry.



MATHEMATICS

As part of The Global School®, the Mathematics Department seeks to incorporate some of the best mathematical pedagogy from around the world. Also, taking a page from some of Asia’s most successful systems, students build new knowledge from previously learned skills and become comfortable with multi-step problems. Our mission is to expand each student's quantitative reasoning skills in order to ensure success in their higher mathematical endeavors and in their post-secondary education. Students learn to face mathematical problems with confidence while becoming equipped with the necessary skills and strategies to be successful. Students are taught how to solve problems both with and without technology. Math courses are yearlong and, except for courses such as Statistics, are designed to be sequential. Due to the diverse backgrounds of entering students, all new students are placed in appropriate courses by the department chair. Enrollment in Honors, Advanced Placement and post-Advanced Placement courses requires departmental permission. Typical course progression options are listed below. Please see complete descriptions for more information.

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
Algebra I Honors Algebra 1 Geometry Honors Geometry Equations & Functions	Equations & Functions Geometry Honors Geometry Algebra 2 Honors Algebra 2 Precalculus Honors Precalculus	Equations & Functions Algebra 2 Honors Algebra 2 College Preparatory Math Precalculus Honors Precalculus Calculus AP Calculus AB	College Preparatory Math Statistics & Probability Precalculus Honors Precalculus Calculus AP Calculus AB AP Calculus BC Multivariable & Vector Calc. AP Statistics

Algebra I

Level: Introductory

Prerequisite: Pre-Algebra

Overview: Topics in this course include linear equations and inequalities, graphing linear equations and inequalities, exponents, factoring, absolute value expressions and functions, and an introduction to quadratic equations. Students will develop foundational algebra skills and prepare for Geometry.

Honors Algebra I

Level: Accelerated Introductory

Prerequisite: Pre-Algebra and departmental permission

Overview: Topics studied in-depth in this accelerated course include: linear equations and inequalities; graphing linear equations and inequalities; exponents; factoring; and absolute value expressions and functions. In addition, students are introduced to quadratic equations and right-angle trigonometry. Students will develop foundational algebra skills and prepare for Geometry.

Equations & Functions

Level: Introductory

Prerequisite: Algebra I, teacher recommendation

Overview: Through gradual pacing and an activity-based approach, students are introduced to key algebraic concepts: linear equations, systems of linear equations, exponent operations, quadratic equations and a brief introduction to radical calculations. The course utilizes lecture, activities, math videos and group work to prepare students for Algebra II.

This course is not approved for NCAA credit

Geometry

Level: Introductory

Prerequisite: Algebra I

Overview: This course is an introduction to: the basic elements of Euclidean geometry; measurement, proof development, congruency and similarity in two- and three-dimensional settings; and area, volume and other applications of geometry. Students will develop geometric reasoning skills, reinforce algebra skills and prepare for Algebra II.

Honors Geometry

Level: Accelerated Introductory

Prerequisite: Algebra I and departmental permission

Overview: Students in this accelerated program are introduced to the basic elements of Euclidean geometry; measurement, proof development, congruency and similarity in two- and three-dimensional settings; and area, volume and other applications of geometry. Students will develop geometric reasoning skills, reinforce algebra skills and prepare for Algebra II.

Algebra II

Level: Intermediate

Prerequisite: Algebra I and Geometry

Overview: This course focuses on manipulation of algebraic quantities and solving equations and inequalities. Students will gain skill in recognizing, understanding and graphing linear, quadratic, higher-degree and exponential functions as well as systems of equations and inequalities.

Honors Algebra II

Level: Accelerated Intermediate

Prerequisite: Algebra I, Geometry and departmental permission

Overview: In this course, students will experience an in-depth study of the manipulation of algebraic quantities and solving equations and inequalities. They will learn to recognize, understand and graph linear, quadratic, higher-degree and exponential functions as well as systems of equations and inequalities, including logarithms and matrices.

College Preparatory Math

Level: Intermediate

Prerequisite: Algebra I, Algebra II and Geometry, teacher recommendation

Overview: This course serves to reinforce algebra skills and prepare students for the next level through in-depth coverage of linear and quadratic equations, exponential and radical number concepts and trigonometric topics. Students gain confidence and improved readiness for college math. *This course is not approved for NCAA credit.*

Statistics & Probability

Level: Intermediate, Grade 12 and postgraduate

Prerequisite: Algebra I, Algebra II and Geometry

Overview: Students will embark on the study of group data applied to a variety of real-world problems. Graphic, numeric and algebraic analysis (with and without technology), and group projects will allow students to examine statistical and probability concepts from a broad perspective.

AP Statistics

Level: Advanced Placement. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Algebra I, Geometry, Algebra II and departmental permission

Overview: Students are exposed to four broad conceptual themes: exploring data – describing patterns and departures from patterns; sampling and experimentation – planning and conducting a study; anticipating patterns – exploring random phenomena using probability and simulation; and statistical inference – estimating population parameters and testing hypotheses. In addition to preparing students for the AP Statistics exam, this course prepares them to use their statistical knowledge to determine the validity of surveys and reports, analyze scientific data and design experiments in future college-level work.

Precalculus

Level: Advanced

Prerequisite: Algebra I, Algebra II and Geometry

Overview: Emphasis in this course is on functions – linear, piece-wise, quadratic, higher-degree, rational, exponential, logarithmic and trigonometric. Students will participate in an in-depth study of trigonometric identities.

Honors Precalculus

Level: Accelerated advanced

Prerequisite: Algebra I, Algebra II, Geometry and departmental permission

Overview: The emphasis in this accelerated course is on functions – linear, piece-wise, quadratic, higher-degree, rational, exponential, logarithmic and trigonometric. In addition, students will participate in an in-depth study of trigonometric identities, polar equations, conic sections and limits.

Calculus: Calculus with Applications

Level: Advanced, Grade 11 or above

Prerequisite: Algebra I, Algebra II, Geometry, Precalculus and departmental permission

Overview: This course is the study of differentiation and integration and how both functions relate to the business world. Students use graphic, numeric and algebraic analysis with and without technology to develop foundational calculus skills with business applications.

AP Calculus AB: Calculus I

Level: Advanced Placement, Grade 11 or above. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Precalculus and departmental permission

Overview: This college-level course is intended for students who wish to develop a strong base understanding of the concepts of calculus. Topics include limits, calculating derivatives and integrals (polynomial, rational, logarithmic, trigonometric, and inverse trigonometric functions), maxima and minima, slope fields, exponential growth and volumes of solids. Students will perform graphic, numeric and algebraic analysis (with and without technology) and prepare for the AP Calculus AB exam.

AP Calculus BC Plus: Calculus II

Level: Advanced Placement, Grade 12. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: AP Calculus AB (Calculus I) and departmental permission

Overview: This college-level course builds on topics learned in Calculus I. This course goes beyond the curriculum for AP Calculus BC in depth and breadth. Topics include integration by parts, integration by trigonometric substitutions, Euler's Method, differential equations, logistics growth, sequence, series, polynomial approximations using series, Maclaurin and Taylor Series, and parametric, polar and vector functions. Students will perform graphic, numeric and algebraic analysis with and without technology and prepare for the AP Calculus BC exam.

Multivariable and Vector Calculus: Calculus III

Level: Post-Advanced Placement

Prerequisite: AP Calculus BC (Calculus II) and departmental permission

Overview: A college-level course focusing on multivariable and vector applications of calculus, this course will cover topics including vectors and planes, surfaces in space, vector-valued functions, differential calculus, functions of several variables, multiple integration, vector fields, Green's Theorem and Stoke's Theorem. Through graphic, numeric and algebraic analysis (with and without technology), students will expand the knowledge learned in prior math courses, especially Calculus I and II.



SCIENCE

The Science Department is dedicated to expanding students' scientific knowledge through inquiry and investigative skills that enable students to live and contribute in the 21st century society. Students are challenged to investigate, discover, analyze and interact while learning the fundamental principles of the natural and physical sciences on their path to scientific literacy. Through the crosscutting concepts put forth in the Next Generation Science Standards from the National Research Council and the National Academy of Sciences and Engineering, we link the discrete disciplines using learning that focuses on engineering and design practices that will empower our students to become innovative thinkers. To better reflect the modern world understanding of chemistry and biology, the Academy has adopted the physics-chemistry-biology sequence. Strong critical thinking and problem-solving capabilities are the hallmark of a global citizen and ensure success in secondary and post-secondary scientific endeavors. There is no better discipline than physics to establish and benchmark these tools. The concepts of forces and energy, introduced from the physics standpoint in Grade 9, are content themes that thread through the entire science curriculum. All Grade 9 students take STEM 9, and then progress to chemistry (Grade 10), biology (Grade 11) and AP courses or other electives (Grade 12) including more in-depth physics options. In all classes, students learn through such vehicles as project and problem-based investigations, hands-on experimentation, demonstration, computer simulations, research projects, and the use of the Academy's greenhouse and natural areas as living labs. *Enrollment in Honors and Advanced Placement courses as well as the Research Program requires departmental permission.*

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
STEM 9: Physics	Chemistry Honors Chemistry	Biology Honors Biology AP Chemistry Honors Advanced Physics Physics for Engineering	Honors Advanced Physics Physics for Engineering AP Physics C AP Chemistry AP Biology Environmental Science AP Environmental Science Human Anatomy & Physiology

STEM 9: Physics with a Global Perspective

Level: Introductory, Grade 9

Prerequisite: none

Overview: This conceptual physics course is designed to provide all students with the foundations for success in any of the sciences. To develop analytical reasoning and critical thinking skills demanded of 21st century learners, and to incorporate the hallmarks of global citizenry, this course will exploit project and problem-based learning to strengthen problem solving ability and information processing. Physics concepts will always thread back to the unifying topic of energy. By melding a skills-based approach to science with fundamental content, students will develop and enhance those strategies that will be the basis for all future science courses. Learning will combine both collaborative and independent study. Many modules will examine global and international issues related to the science content in order to better understand that the Nature of Science is very much a social endeavor. Experimentation and design will have both traditional and student-developed components. Students will incorporate communication-of-science skills through research, technical writing and presentation components, as well as deeper reading and guided independent study.

Chemistry

Level: Introductory, Grades 10 and 11

Prerequisite: none

Overview: This course is an overview of the chemical nature of matter. Students will study the composition, structure, properties, and reactions of atoms and molecules. This inquiry-based course leads students to develop analytical, critical reasoning skills that extend beyond the chemistry discipline. They will acquire the skills and knowledge inherent to chemistry in order to understand other branches of science more deeply.

Honors Chemistry

Level: Accelerated introductory, Grades 10 and 11

Prerequisite: departmental permission

Overview: This course is an in-depth introduction to matter and the ways its behavior is expressed and analyzed, providing a basis for understanding the physical nature of matter and building skills that help students learn through evidence-based reasoning. Through lecture, discussion and hands-on experimentation, students gain an overview of the chemical nature of matter and develop analytical, critical reasoning skills that extend beyond the chemistry discipline and enable them to examine other branches of science more deeply.

AP Chemistry

Level: Advanced Placement, Grade 11 or above. The AP exam in May is mandatory. Exam fee charged.

Prerequisite: one yearlong laboratory chemistry course, departmental permission

Overview: This college-level, lab-based course continues in-depth study of the basic concepts of chemistry with emphasis on the application of math skills, including algebra and statistics, as important tools of scientific inquiry. Students deepen skills and content knowledge through lecture, discussion and hands-on experimentation and investigation. Extensive independent work is expected with intense focus both in and outside of the classroom.

Biology

Level: Introductory, Grade 11

Prerequisite: Chemistry

Overview: This course is an overview of the fundamental principles of living organisms, their processes and how they interact with the environment. It includes the study of cell structure and function, genetics and heredity, evolution and classification, the diversity of living organisms and their ecological roles. Students will develop scientific process skills in observation, measurement, data collection and analysis, learning and understanding concepts through a combination of lecture, demonstration, discussion and laboratory experimentation. The Academy's natural areas are used for outdoor investigations.

Honors Biology

Level: Accelerated introductory, Grade 11

Prerequisite: Chemistry and departmental permission

Overview: This course uses lectures, demonstrations and laboratory experimentation to study how living organisms function and interact in the natural world. Major topics include cell structure and function, energy systems, genetics, evolution, plant and animal physiology and human biology. Emphasis is on the unifying themes of biology: diversity, adaptation and the struggle for survival. Students use a variety of laboratory tools and models to study living and prepared specimens, learn basic techniques such as dissection and microscopy, and design experiments and identify/classify living organisms in vivo and in vitro. The Academy's natural areas are used for outdoor investigations.

AP Biology

Level: Advanced Placement, Grade 11 or above. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Chemistry, one yearlong biology course, departmental permission

Overview: The speed with which scientific knowledge is expanding has made it necessary to shift from a "content coverage" approach to an approach that is inquiry-based learning of essential themes and patterns that pervade all content. This shift helps students develop the reasoning skills necessary to engage in science practices used throughout the study of AP Biology. The four essential concepts in the course are outlined in the AP Biology course description available on the College Board website. Students will develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data and applying mathematical routines and connecting concepts in and across domains. This course is equivalent to a two-semester college introductory biology course.

Human Anatomy and Physiology

Level: Introductory, Grade 11 or above, *Note: Not a lab-based course; does not fulfill the science requirement.

Prerequisite: Biology and Chemistry

Overview: This course studies the structure and function of the human body and the mechanisms for maintaining homeostasis within it. The course introduces students to the study of all the body systems and the inter-relationship between anatomy and physiology. Topics covered include: orientation to the human body, chemistry, cells and tissues, integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.

Physics for Engineering

Level: Introductory, Grade 11 and above

Overview: This problem-based course is an introduction to the intersection of engineering design and physics. It is meant for students who want to explore engineering but might not be ready for a more theoretical or calculus-based study of physics that will be required in advanced engineering courses. Students are exposed to authentic applications associated with various branches of engineering (for example: Mechanical, Structural, Chemical, Materials, Biological, and Environmental Engineering). Through short and long-term collaborative student-centered investigations all students develop a solid understanding of fundamental physics principles and demonstrate mastery of the engineering design process.

Prerequisite: Algebra II, departmental permission

Honors Advanced Physics

Level: Intermediate, Grade 11 and above.

Prerequisite: Algebra II (students should be in Precalculus concurrently), departmental permission

Overview: This honors level course is for students looking to develop an in-depth understanding of fundamental principles of physics. Concept development uses algebra-based mathematical problem solving for an in-depth study of dynamics. Overviews of other topics include waves motions, electricity and magnetism, optics, and some modern physics. Students learn through a combination of lecture, demonstration, discussion, laboratory experimentation, and quantitative data analysis. Students may opt to take the AP Physics 1 exam with instructor recommendation. A fee is charged for AP exams.

AP Physics C

Level: Advanced Placement, Grade 11 or above. The AP Physics C: Mechanics exam in May is mandatory. Exam fee is charged.

Prerequisite: AP Calculus AB, departmental permission

Overview: This course is equivalent to a one-semester college-level physics course: Introduction to Mechanics. It is a calculus-based approach where techniques in mathematics are applied to physics concepts and problem solving. Topics in the course are outlined in the AP Physics Course Description online, as required by the College Board. Students will improve skills in applying calculus-based mathematics to fundamental concepts learned in Newtonian Mechanics.

Environmental Science

Level: Introductory, Grade 11 or above

Prerequisite: none (some exposure to both chemistry and biology preferred)

Overview: This course is an introduction to environmental science - the study of how humans affect the environment and the organisms living in it. Major topics include ecology, ecosystem dynamics, energy resources, climate change, waste management and human health issues. Students explore the political, economic and cultural issues that affect environmental policies and practices through class discussion, lectures, hands-on laboratory experiments and outdoor fieldwork. Students gain insight into our evolving role/impact on the environment and better understand the nature and processes of our world through experimentation, observation, data collection and analysis.

AP Environmental Science

Level: Advanced Placement, Grade 11 or above. The AP exam in May is mandatory. Exam fee is charged.

Prerequisite: Biology and Chemistry, departmental permission

Overview: This college level, lab-based course is an in-depth investigation of how humans have impacted the environment. Topics include diminishing biodiversity, freshwater shortages, global warming, fossil fuel depletion and long-range import of air pollutants. Students gain insight into our evolving role and impact to the environment and better understand the nature and processes of our world through experimentation, observation, data collection and analysis. The course primarily utilizes outdoor labs and fieldwork, including investigations of soils, water, terrestrial ecosystems and population biology with a focus on possible solutions for a sustainable future. In addition, students will participate in class discussion, lectures and hands-on laboratory experiments.

COMPUTER SCIENCE & TECHNOLOGY

An understanding of computational thinking and the fundamental principles of computer science are becoming more and more valued across all disciplines. Colleges, universities and the industries they feed note the necessity of being conversant with these practices in all fields. WMA is committed to the design and implementation of a program that provides grounding in these skills for all students, and is also a gateway for those who wish to pursue computer science in more depth. The Exploring CS series of electives develops the computational thinking skills that are applicable in any discipline. Mobile Computer Science Principles deepens the understanding of these skills and is also accessible to students who don't think of themselves as traditional computer science students. This suite of courses encompasses a comprehensive set of inquiry-based lessons, which use a variety of tools and platforms. A major aim of these courses is to attract students who might not think of themselves as "typical" candidates for computer science and allow them to explore project-based lessons that emphasize writing, communication, collaboration, and creativity. For students interested in more coding and programming, the traditional Java Programming and AP Computer Science A are available online, through Virtual High School.

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
CS Trimester Electives	CS Trimester Electives Java Programming Introduction to Python Mobile CSP	Java Programming Mobile CSP AP Computer Science	Mobile CSP AP Computer Science

CS: Exploring Web Design and Scratch Programming

Trimester

Level: Introductory, open to Grades 9 through PG.

Prerequisite: none

Overview: Students take the role of developer as they design a web page while exploring issues of social responsibility. They plan and code their web pages using a variety of tools and collaborate with their peers to ensure usability and relevance. Students will also explore programming as they design, code, test and execute a program that corresponds to a set of expectations. They will use the Scratch (MIT Media Lab) visual programming tool to develop understanding of the logical processes of programming which are applicable across computer languages. As the student designers work through all concepts, they will apply the fundamental notions of Human Computer Interactions and algorithmic problem-solving techniques.

CS: Exploring and Using Big Data

Trimester

Level: Introductory, open to Grades 9 through PG.

Prerequisite: none

Overview: Students explore how computing has facilitated new methods of managing and interpreting data. Students will review the connections between mathematics and computer science. They will use computers to translate, process and visualize data in order to find patterns and test hypotheses. Students will discuss appropriate methods for data collection and aggregation of data necessary to support making a case or facilitating a discovery. They will examine what constitutes a good survey and create one for a personalized study. Students will work with a variety of large data sets that illustrate how widespread access to data and information facilitates identification of problems. Students will use popular tools for organization and analysis of datasets.

CS: Exploring Robotics

Trimester

Level: Introductory, open to Grades 9 through PG.

Prerequisite: none

Overview: Robotics is an advanced application of computer science increasingly found in all sectors of human endeavor. Robots can be used to solve problems in a variety of settings from business to healthcare and can enable innovation by automating processes that may be dangerous or otherwise problematic for humans. Students explore how to integrate hardware and software to solve problems and enhance their programming capabilities as they build and program a robot that solves a stated problem. Student engineers will be able to identify the criteria that describe a robot and determine if something is a robot; match the actions of the robot to the corresponding parts of the program; and explain ways in which different hardware designs affect the function of a machine while considering the tradeoffs of one design versus another.

Introduction to Python

Trimester

Level: Introductory, Grade 10 and above

Prerequisite: none

Overview: Python is a versatile computing language; its syntax is relatively easy to learn, readable and understandable. This introductory course does not require any prior experience with programming. The class will have access to Python interpreter and a library of previous source code for analysis. Students will begin with an easy to learn introduction using Python Turtle to guide a turtle around a screen using computer commands. They will progress to writing different script and increase the complexity of commands as their foundation in the Python script increases. Each student will develop Python script to solve a series of problems increasing in complexity. Students will present their most interesting problem-solving Python program to the class at the conclusion of the course. The complexity of the program will be determined by the knowledge and ability of the student.

Mobile Computer Science Principles

Level: open to grades 11 through PG, Grade 10 with permission

Prerequisite: none

Overview: Mobile CSP is a project-based course based on the AP Computer Science Principles framework. The course covers the 7 Big Ideas and 6 Computational Thinking Practices of Computer Science. During the course, students complete two collaborative programming projects and an individual research and writing project on the impact of a recent, computing innovation that appeals to the student. These projects conform to the College Board's two performance tasks on programming and impact. The Mobile CSP course uses the visual programming language, App Inventor for Android, to provide a rigorous, programming-based introduction to computer science using a project-based curriculum. Students learn computer science by building socially useful mobile apps. In this way, student learning will be associated closely with their interests and grounded in their schools, their homes and their communities.

Java Programming – Virtual High School - Online***

15-week course (1.5 credits)

Level: Grade 10 and above. This course has VHS fees

Prerequisite: One year of Algebra and department permission

Overview: This course is an introduction to Computer Science, covering the basic concepts and elements of the Java programming language and introducing object-oriented programming. Students will gain experience in writing programs that are well documented according to industry standards and will have the opportunity to create Java Applets and learn about Graphical User Interface programming with Swing. Additionally, the students will be encouraged to work both independently and collaboratively to solve practical problems that illustrate application-building techniques. This course is intended to teach and reinforce crucial academic skills to help students strengthen their background in computer science prior to taking an Advanced Placement course.

AP Computer Science A – Virtual High School - Online***

Level: Grade 10 and above. This course has VHS fees. The AP exam in May is mandatory and exam fees are charged.

Prerequisite: Java Programming and department approval. Students must be in Calculus (concurrently).

Overview: AP Computer Science is a course designed to awaken and support students' problem-solving skills. The course will introduce the Java programming language while emphasizing universal language techniques like syntax, semantics and readability. Students will gain mastery in programming concepts by using a subset of Java features that are covered when needed throughout the course content. This allows the student to understand and master important concepts that will apply to programming problems in many additional languages. Students will begin by encountering situations that involve solving problems with the use of primitive data types, methods, and control statements. Later, this inquiry will evolve into the use of Object Oriented Programming (OOP), which is today's most common and practical way to develop software. Throughout the course, students will also grow to understand how computers process information. This understanding will deepen as students apply concepts like string manipulation, the behavior of elements in arrays and lists, and the use of external data to interact with algorithms. The College Board's AP[®] Computer Science curriculum presents three hands-on laboratory practice sets that will help students synthesize course concepts. These labs will expand and secure their knowledge of programming and prepare them thoroughly for the AP[®] Computer Science exam in May.

***** Students will need to adhere to a different academic schedule due to the structure of this online course. Work will be expected during WMA vacation periods.**

THE CENTER FOR ENTREPRENEURIAL & GLOBAL STUDIES (CEGS)

The CEGS Department provides an innovative curriculum encompassing the study of economics, finance, entrepreneurship and global studies while upholding high standards for our traditional history curriculum. We are committed to developing entrepreneurial thinkers who are able to access a variety of skills from the social sciences to investigate and understand complex global issues. It is the belief of the department that a modern citizenry must have an understanding of the origins of cultures, peoples, and economics across the globe and across time. In addition to specific subjects and content, our goal is to expand each student’s academic skills including critical reading, note taking, discussion, research, structured writing and academic documentation. These skills are necessary to ensure students’ success in their post-secondary education, as well as in higher social science, business or entrepreneurial endeavors. Courses in the CEGS program are equivalent to social science credits.

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
World History U.S. History for ESL	Human Geography AP Human Geography U.S. History for ESL	U.S. History AP U.S. History Honors Gov’t & Diplomacy AP Macroeconomics Honors Microeconomics CEGS Trimester Electives	Honors Gov’t & Diplomacy AP World History AP Macroeconomics Honors Microeconomics CEGS Trimester Electives

World History

Level: Introductory, required Grade 9.

Prerequisite: none

Overview: Starting with the emergence of agriculture, this course investigates the development of humans, technology, and the environment. Students will explore world history through themes of power, identity, justice, and moral codes. Using *A Compact History of Humankind: The History of the World in Big Eras*, the course content includes a combination of broad historical backgrounds and in-depth case studies of specific groups, regions, and people. Throughout the year, we cultivate the necessary skills sets to succeed in a history-based course, including comprehension of content, research, analysis and interpretation, chronological reasoning, and application of historical concepts. Students develop these skills by critically reading primary and secondary sources, writing, presenting, negotiating and working collaboratively.

Human Geography

Level: Intermediate, Grade 10.

Prerequisite: none

Overview: This course is an in-depth study of geography and emerging themes in globalization, with a focus on key geographic regions of the world, emerging economic issues in globalization, the role of the entrepreneur and leader, and traits inherent in current and past global leaders and their key decisions. The course aims to create an understanding of the interconnectedness of the modern world and to build students’ confidence in their ability to be global citizens and leaders. Students gain skills in critical reading, researching, writing, note taking, outlining and verbal skills through class discussion, presentations and written formats.

AP Human Geography

Level: Advanced Placement, Grade 10. The AP exam in May is mandatory. AP exam fee charged.

Prerequisite: departmental permission

Overview: This college level course is an in-depth rigorous study of how geographic interaction has shaped the world in which we live, particularly the themes of globalization and cultural diversity. Students will examine geography from a social science perspective, though physical science will also be emphasized in order to contextualize the region of study. The course is organized into seven units of study: Geography-Its Nature and Perspectives; Population; Cultural Patterns and Processes; Political Organization of Space; Agriculture and Rural Land Use; Industrialization and Economic Development; and Cities and Urban Land Use. Students will investigate key geographic, economic and social themes with a focus on improving their critical reading of text and maps, researching, writing, note taking, outlining and verbal skills through class discussion, presentations and written formats. Students will gain an understanding of the interconnectedness of the modern world and build confidence in their ability to be global citizens and leaders.

United States History

Level: Grade 11. Prerequisite: None

Overview: Students survey American historical development from the colonial period to contemporary times. Topics considered include: nationalism, industrialization, the emergence of the U.S. as a world power, protest and reform movements, and development of the modern U.S. political and economic structure. Students develop critical reading and analytical skills of primary and secondary source materials through research, writing, note-taking, outlining and verbal communication accomplished with a variety of discussion and writing formats.

United States History for ESL Students

Level: Introductory. Fulfills the Academy's U.S. history requirement. Prerequisite: ESL Department permission

Overview: This course is designed to give international students an introduction to the development of America's social, political and cultural traditions from colonial times through the American Civil War. Students develop an awareness of the cultural and geographic diversity of the United States and are exposed to differing viewpoints of the American people through the use of textbooks, supplementary readings, relevant websites and current news sources. The class focuses on key research and writing skills including note-taking, outlining, essay preparation and proper source citation.

Honors Government and Diplomacy

Level: Honors, Grade 11 and above

Prerequisite: Successful completion of a Grade 10 history course with a B+ or higher and recommendation of the instructor

Overview: This course focuses on the institutions, issues and challenges present in the global realm of diplomacy and foreign policy. Using both the United States and other nations as case studies, students will examine how power is created, attained and shared. Components of study will include both Institutions (executive, legislature, courts, bureaucracy, media) and processes (elections, interest groups, grass roots movements). Students will also study specific contemporary issues of diplomacy compiled annually by the Foreign Policy Association. Each week (or two) students will discuss and analyze a reading dealing with a current issue in global foreign policy. Examples include Russia's foreign policy, the relationship between China and America, South Africa's fragile democracy, and the media and foreign policy. Finally, students will study specific skills inherent in successful diplomacy: tact, negotiation, discretion, and communication. Readings, quizzes, exams, oral presentation and debates will all be components of skill development and assessment. Periodic short position/advocacy papers will be assigned, and a longer format paper will culminate coursework.

AP United States History

Level: Advanced Placement, Grade 11 or above. The AP exam is mandatory. AP exam fee charged.

Prerequisite: departmental permission

Overview: This course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S. history survey courses' increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491-1607 and from 1980-present. The course will explore nine different periods of U.S. history. Students develop ability in distinguishing fact from opinion, using primary sources, analyzing and synthesizing information, relating cause and effect, and presenting and defending personal perspectives based upon historical information. Students also learn to integrate cultural and social history to literature of the times. Research/reading beyond the text is often required and is expected for many assignments.

AP World History

Level: Advanced Placement, Grade 11 or above. The AP exam is mandatory. AP exam fee charged.

Prerequisite: Departmental permission

Overview: AP World History is a college level survey of world history from the perspective that ever-increasing trade and interconnectedness between societies, nations and cultures is the driving force of historical change. This course focuses on historical reasoning skills, allowing students to find and interpret primary source historical data; compare and contrast societal developments across time, geography and culture; and analyze change in history as a process with causes and consequences. Students should expect a high volume of reading and writing, as well as periodic tests measuring baseline historical content. Students are also expected to undertake two research projects through the course of the year. Students exiting the course will have a strong understanding of how historians organize history, how to develop a complex thesis driven response to historical questions and how to tie regional historical events into the context of world history.

AP European History – Virtual High School-Online***

Level: Grade 10 and above. This course has VHS fees. The AP exam is mandatory. AP exam fee charged.

Prerequisite: World History and department permission required

Overview: During this full-year course, students will investigate the broad themes of interaction between Europe and the World, Poverty and Prosperity, Objective Knowledge and Subjective Visions, States and Other Institutions of Power, and the Individual and Society, while making crucial connections across four different chronological periods ranging from 1450 to the present. In addition, the course is focused toward 19 key concepts, which enable students to better understand, organize, and prioritize historical developments within a chronological framework. As students learn to analytically examine historical facts and evidence, they will gain deeper conceptual understandings of critical developments in European history and will understand issues from multiple perspectives. Solid reading and writing skills, along with a willingness to devote considerable hours to homework and study, are necessary to succeed in this rigorous course. The challenging and stimulating curriculum requires much more time than other high school courses. This course specifically encourages the development of students' skills in the categories of chronological reasoning, comparison and contextualization, construction of evidence-based arguments, and interpretation and synthesis of historical narratives, all competencies essential for college and career success.

***Students may be scheduled into an "online learning block" with a faculty coordinator to oversee their progress. Students will need to adhere to a different academic schedule due to the semester structure of this online course. Work will be expected during WMA vacation periods.

AP Macroeconomics: The Global Economy

Level: Advanced Placement. The AP exam in May is mandatory. AP exam fee charged.

Prerequisite: Departmental permission

Overview: The purpose of the AP course in macroeconomics is to provide students with a learning experience equivalent to a typical college introductory macroeconomic course and prepare them for the AP exam in the spring. Students will be taught economic principles that apply to an economic system as a whole. Emphasis is placed on the study of national income, price determination, the financial sector, stabilization policies, economic growth, and international economics. Through lectures, class discussions, class activities and homework assignments, students define terms, calculate and interpret tabular data, conduct graphical analysis, analyze hypothetical scenarios, and develop skills in explanatory diagrams and technical writing. The course utilizes the text *Principles of Economics* by Gregory N. Mankiw in addition to supplementary reading and listening material.

GLOBAL STUDIES/HISTORY ELECTIVES

Introduction to Sociology

Trimester

Level: Grade 11 or above.

Prerequisite: none

Overview: This seminar-based course offers an introduction to the field of sociology, followed by an investigation of some of the issues and currents of contemporary American life from numerous sociological perspectives. The initial work will present some fundamental concepts and perspectives. These will include the definition of sociology, culture and socialization, as well as how sociologists conduct their work. Students will gain a general understanding of sociologists' methodology and sociological paradigms with some in-depth examination of certain issues such as gender, race and deviance.

The Vietnam Experience

Trimester

Level: Grade 11 or above. Approved for NCAA credit.

Prerequisite: none

Overview: This trimester elective examines the American involvement in Southeast Asia during the Vietnam War. The course introduces students to the history, writing, cinematography and music of the Vietnam War and time period. Texts utilized include *The Vietnam War*, *A Rumor of War* and *The Things They Carried*. The class is a seminar-discussion based exercise, which requires student preparation and active participation.

International Relations

September- February (1 credit)

Level: Advanced, Grade 10 or above

Prerequisite: Application Process. This course has a \$350 fee.

Overview: This unique elective introduces students to the United Nations experience while investigating topics of national and international significance. Students represent international diplomats for an assigned country at Harvard University's Model United Nations in January. Students will develop and refine research, writing, oral presentation and time management skills.

ECONOMICS/ENTREPRENEURSHIP ELECTIVES

Introduction to Market Economies

Trimester

Level: Introductory, Grade 10 or above. Approved for NCAA credit.

Prerequisite: none

Overview: This course is an introduction to the core principles of economics and how market economies all over the world function. Topics considered include the four goals of economic policy: productivity and growth; price stability; full employment; and exchange stability. The course introduces the laws of supply and demand, measurements of economic performance, tools of the financial sector, productivity, stabilization policies, international trade and the contribution of the entrepreneur to economic development and management. It is a prerequisite to CEGS advanced electives in economics, finance and entrepreneurship. Students gain skills in analytical reading and writing, research, note-taking and verbal presentation through class discussions.

Entrepreneurship

Trimester

Level: Intermediate, Grade 10 or above

Prerequisite: Introduction to Market Economies or departmental permission

Overview: Students prepare for becoming responsible, enterprising entrepreneurs or entrepreneurial thinkers who contribute to economic development and sustainable communities. The curriculum follows the framework of the National Standards for Entrepreneurship Education. Students will use strategies for idea generation and assessment of feasibility of ideas; learn to understand basic free market economy and the entrepreneur's role in the economy; expand their awareness of social responsibility and the entrepreneur's contribution to society; demonstrate an understanding of financial management and basic accounting principles; and understand steps essential in business startup. Students will read related literature, including case studies, and create new model ventures with a focus on opportunity recognition, resource management, and team building.

Global Entrepreneurship

Trimester

Level: Intermediate, Grade 10 or above

Prerequisite: Introduction to Market Economies or departmental permission

Overview: This course is designed to develop a basic understanding of some of the variety of business systems in Asia (or Europe) and the opportunities/pitfalls of operating a business in one or more of these societies. Students will understand the evolution and development of business in global societies; how and why they are different/similar; the relationship of the business system to the culture and history of that nation; the special advantages of different nations and their prospects for the future; economic strengths and weaknesses; and the relationship to the global economy.

Social Entrepreneurship

Trimester

Level: Advanced, Grade 10 or above

Prerequisite: Entrepreneurship or Global Entrepreneurship

Overview: The Social Entrepreneur is someone who creates and runs a specialized nonprofit or public sector enterprise. In this course, students will explore ways to apply the basic business concepts learned in Entrepreneurship to solve the world's toughest social and environmental problems. The students will create a model business that will raise funds for a social or environmental cause of their choice and then dissolve the business at the end of the trimester with monies earned going to a nonprofit of that cause. These individual projects will weave issues of accounting, finance, organizational management, and marketing with social and ethical responsibility.

Portfolio Management

Trimester

Level: Intermediate, Grade 10 or above

Prerequisite: Introduction to Market Economies or departmental permission

Overview: This one trimester course provides an overview of how an individual would build a portfolio over time and manage a portfolio based on the fundamental principles of portfolio management. Emphasis will be placed on techniques to develop a portfolio, researching mutual funds and stocks, and the evaluation of portfolio performance. Topics will include portfolio diversification, investment analysis, risk, financial literacy and asset allocation. Projects include researching a mutual fund company and preparing a personal investment plan.

Stock Market Analysis

Trimester

Level: Intermediate, Grade 10 or above

Prerequisite: Portfolio Management

Overview: This one trimester course provides advanced study of the stock market and interpreting financial statements in order to select stocks for a portfolio. Students will learn the application of technical analysis and fundamental analysis in selecting stocks that matches risk tolerance. Long-term stock investment analysis and trading strategies will be examined in relation to portfolio theory and cycles in the stock market.

Honors Microeconomics

Two Trimester (2 credits)

Level: Advanced, Grade 11 and above. Approved for NCAA credit.

Prerequisite: Departmental permission

Overview: Students will be taught economic principles that apply to the functions of individual decision makers, both consumers and producers, within the economic system. Emphasis is placed on the nature and functions of product markets and factor markets, and of the role of government in promoting greater efficiency and equity in the economy. Through lectures, class discussions, class activities and homework assignments, students define terms, calculate and interpret tabular data, conduct graphical analysis, analyze hypothetical scenarios, and develop skills in explanatory diagrams and technical writing. The course utilizes the text *Principles of Economics* by Gregory N. Mankiw in addition to supplementary reading and listening material. The AP Microeconomics exam in May is not mandatory, but is an option. Exam fee charged if taken.



WORLD LANGUAGES

Learning a foreign language is an inherently global experience, therefore it forms an essential part of our curriculum as The Global School®. Through language, students appreciate ideas, art and cultural differences and discover that culture is globally contextual. Moreover, learning a language encourages students to engage in public speaking and to share ideas collaboratively. The result is curriculum that nurtures global citizens and leaders.

The World Languages Department offers instruction in two modern languages, Spanish and French, and one classic language, Latin. The four components of language instruction – reading, writing, speaking and listening – form the core of the language courses. Students are challenged to engage in these activities on a regular basis. Furthermore, through language, students are exposed to diverse perspectives on art, history, current events and culture. Language study is enhanced by the use of technology such as educational apps, authentic video and audio media, language podcasts and interactive educational websites. Departmental permission is a prerequisite for all language courses beyond the first year of study.

Grade 9 Options	Grade 10 Options	Grade 11 Options	Grade 12 & PG Options
French 1 French 2 Latin 1 Latin 2 Spanish 1 Spanish 2	French 2 Honors French 3 Latin 2 Honors Latin 3 Spanish 2 Spanish 3 Honors Spanish 3	Honors French 3 Honors French 4 Honors Latin 3 Honors Latin 4 Spanish 3 Honors Spanish 3 Spanish 4 Honors Spanish 4	Honors French 4 Honors French 5 AP French Honors Latin 4 AP Latin Spanish 4 Honors Spanish 4 AP Spanish

French 1

Level: Introductory

Prerequisite: None

Overview: Students develop the abilities needed for effective participation in everyday situations in a Francophone country through the introduction of the four basic language skills: aural comprehension, speaking, reading and writing. The course emphasizes basic structures of language and a high-utility vocabulary to help students develop competency in the use of basic grammatical structures and vocabulary. Students will participate in role-play of everyday situations. The course uses reading selections, film and other authentic materials, in addition to the text. Students earning a C or better may continue to French 2.

French 2

Level: Intermediate

Prerequisite: A yearlong grade of C or better in French I, passing the French I final exam, and teacher recommendation

Overview: This course fosters students' knowledge of the cultural variety of the modern Francophone world through readings, film and realia with an emphasis on the four language skills. Increased importance is placed on grammatical instruction and practical vocabulary. Students work to develop competency in more complicated grammatical structures and vocabulary. Reading selections, film and other authentic materials supplement the text. Students will be assessed with grammar and vocabulary quizzes, chapter tests, projects/presentations and a cumulative final exam.

Honors French 3

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B- or better in French 2, passing the French 2 final exam and teacher recommendation

Overview: Through enriching vocabulary, increasing usage of advanced grammatical concepts, listening comprehension practice and the study of French literature and films, students gain knowledge of the cultural variety of the modern Francophone world while developing facility in spoken and written French. Reading selections, film and other authentic materials are utilized in addition to the text.

Honors French 4

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B or better in Honors French 3, passing the Honors French 3 final exam and teacher recommendation

Overview: Students continue to improve their ability to experience everyday situations in a Francophone country, with increased importance placed on the contemporary Francophone world and its culture through spoken and written discussion of ideas as well as everyday communicative competence. They strive to develop proficiency in the advanced levels in the four language skills. Students work to develop fluency in spoken and written French.

Honors French 5

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B or better in Honors French 4, passing the Honors French 4 final exam and teacher recommendation

Overview: Students continue to develop proficiency past the intermediate level in the four skills of listening, speaking, reading and writing within the context of the contemporary Francophone world and its culture. Through enriching vocabulary, increasing usage of advanced grammatical concepts, listening comprehension practice and the study of French literature and films, students gain knowledge of the cultural variety of the modern Francophone world while developing facility in spoken and written French.

AP French

Level: Advanced Placement. AP exam in May is mandatory. AP Exam fee is charged.

Prerequisite: A yearlong grade of A or better in Honors French 4, passing the Honors French 4 final exam and teacher recommendation

Overview: Students continue to develop proficiency in speaking and writing French as well as analyzing cultures of French-speaking countries; open to those students with sufficient language skills and the intellectual maturity and motivation to undertake a college-level language program. The course focus is on spoken and written discussion of ideas, as well as on everyday communicative competence, while exploring the history and cultural diversity of the Francophone world. Students work to achieve a high degree of fluency in French. The AP exam is mandatory.

Latin 1

Level: Introductory

Prerequisite: none

Overview: This course aims to help the student to attain a comprehension of the Latin language through practice in reading it. Using the Cambridge Latin Course Unit 1, students learn about Roman life by reading stories and dialogues pertaining to Roman life in the city of Pompeii in the 1st century C.E. and develop an understanding of Roman culture and civilization, especially during the 1st century C.E. Students earning a C or better may continue to Latin 2.

Latin 2

Level: Intermediate

Prerequisite: A yearlong grade of C or higher in Latin 1, passing the Latin 1 final exam and teacher recommendation

Overview: Students continue their study of the Latin language, with an emphasis on grammar, vocabulary and syntax. The aim of the course continues to be the development of the student's ability to read Latin. The Cambridge Latin Course Units 2 and 3 are used for this purpose. Students continue to explore Roman culture and civilization by reading stories about life in Roman Britain and Roman Egypt.

Honors Latin 3

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B- or higher in Latin 2, passing the final Latin 2 exam and teacher recommendation

Overview: Students continue their journey through the Cambridge Latin Course by finishing Unit 3. In this course students will develop their ability to read more complex Latin passages. They also continue their study of Roman civilization by exploring the monuments and topography of ancient Rome and the early history of the Empire.

Honors Latin 4

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B or higher in Honors Latin 3, passing the Honors Latin 3 exam and teacher recommendation

Overview: Students conclude their journey through the Cambridge Latin Course by reading the Latin stories in Unit 4. In this course, students will make the transition from reading the adapted Latin of the Cambridge Latin Course story line to reading original Latin. Students will read selections from Martial, Ovid, Catullus, Vergil, Horace, Pliny and Livy.

Honors Latin 5

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B or higher in Honors Latin 4, passing the Honors Latin 4 exam and teacher recommendation

Overview: This course is offered to students who have successfully completed Honors Latin 4 with a grade of B or higher and who do not want to take Advanced Placement Latin. In this course, students will read a selection of Latin prose and poetry. Poetry will include selections from Ovid, Catullus, Horace and Vergil. Prose selections will be from Pliny, Livy, Caesar and Cicero. Through these reading selections, students will continue to appreciate the global nature of the Roman experience. Emphasis will be placed on strengthening the student's ability to read Latin.

AP Latin

Level: Advanced Placement. The AP exam in May is mandatory. AP exam fee charged

Prerequisite: A yearlong grade of A- or higher in Honors Latin 4, passing the Honors Latin 4 exam and teacher recommendation

Overview: The main objective of this course is to prepare students for success on the AP Latin exam. In order to achieve this objective, the students will be guided in developing the ability to literally translate into English all of the passages of Vergil's Aeneid and Caesar's De Bello Gallico, which are required by the College Board for the AP Latin program. The students will read the entire Aeneid in English as well as Books 1, 6 and 7 in English from the De Bello Gallico.

Spanish 1

Level: Introductory

Prerequisite: none

Overview: Beginning students study language that can be used in everyday conversation. The course is taught using a communicative approach. Students begin to communicate in the target language through interpersonal speaking and writing, presentational speaking and writing, and interpretive reading and listening. Students communicate about such topics as greetings, telling time, school subjects, foods, family and friends, and leisure activities. This class is conducted in Spanish as much as possible and an emphasis is placed on becoming a competent communicator. Students expand their understanding of culture by studying about the countries of the Hispanic world. Vocabulary will focus on school, shopping, family, clothes, weather, simple foods found in restaurants and markets, holidays and tourist activities.

Spanish 2

Level: Intermediate

Prerequisite: A yearlong grade of C or better in Spanish I, passing the Spanish I final exam and teacher recommendation

Overview: This class continues to emphasize and to build the four basic language skills: listening, speaking, reading and writing. Students learn to express more complex thoughts using a variety of verb tenses, including the present subjunctive, while building vocabulary and developing their writing skills. Classes are conducted in Spanish; however, English is occasionally used to explain difficult grammar and certain material. Students are required to use the target language as they develop all of their skills while they explore Hispanic culture through readings in the textbook complimented by videos with native speakers. Students are encouraged to conduct simple exchanges with native speakers in the community. Class work varies to include listening activities and lessons on the Internet.

Spanish 3

Level: Advanced

Prerequisite: A yearlong grade of B- or better in Spanish 2, passing the Spanish 2 final exam and teacher recommendation

Overview: Spanish 3 begins with a thorough review of the grammatical concepts covered in the first two levels. Students continue to expand their vocabulary while building all language skills. At this level, the past subjunctive is introduced as well as other more advanced grammatical topics. Students are required to use the target language as they develop all of their skills. The class is conducted in Spanish; therefore, students at this level should be comfortable using the target language to speak and able to write using coherent sentences. At this level, reading passages are lengthier and students begin to read short stories. Class work varies to include listening activities and lessons on the Internet as they expand their knowledge of the language and Hispanic cultures.

Honors Spanish 3

Level: Accelerated Advanced

Prerequisite: A yearlong grade of A- or better in Spanish 2, passing the Spanish 2 final exam and teacher recommendation

Overview: At the Honors level students refine their competence in the four skills needed to learn a world language and begin literary analysis. There are frequent quizzes (and less frequent tests), as well as oral work and writing assignments. The students analyze short stories and poems. An honors level course demands a great deal of personal responsibility and determination as students are expected to review basic materials outside the classroom so that class discussions can focus on cultural/literary analysis.

Spanish 4

Level: Advanced

Prerequisite: A yearlong grade of B or better in Spanish 3, passing the Spanish 3 final exam and teacher recommendation

Overview: Spanish 4, conducted entirely in Spanish, is a course for those wishing to continue Spanish studies without any expectation of AP preparation. Through a variety of native (designed for native speakers) sources, as well as using technology and traditional texts, students will examine, discuss and present to develop their speaking and writing skills. Heavy emphasis is placed on speaking both daily in class and in regular presentations and projects. Major and minor assessments, daily participation and research determine the grade.

Honors Spanish 4

Level: Accelerated Advanced

Prerequisite: A yearlong grade of B or better in Spanish 3, passing the Spanish 3 final exam, teacher recommendation

Overview: Honors Spanish 4, taught entirely in Spanish, is designed to perfect students' competence in all modes of expression and to introduce them to the literature, history and culture of the Spanish-speaking world through short stories, novels, poetry and drama. Students increase their understanding of formal and informal speech, improve their spoken fluency by expressing their ideas and beliefs, and advance their writing ability through frequent compositions based on readings and class discussions. The course seeks refinement in interpersonal, interpretive and presentational communication. Use of technology, film and additional readings enhance the content of the course.

AP Spanish Language and Culture

Level: Advanced Placement. The AP Spanish Language and Culture Exam in May is required. AP exam fee charged

Prerequisite: A yearlong grade of A- or better in Honors Spanish 4, passing the final exam and teacher recommendation

Overview: AP Spanish Language polishes students' communicative skills, moving them to a higher level of proficiency in their speaking, listening, writing, and reading of Spanish. A broad range of authentic materials from textbooks, newspapers, the web, film, television and the local community serve as the basis for discussion and investigation of diverse cultural and linguistic themes. The class is conducted exclusively in Spanish and students are expected to participate actively. Evaluation is based on a variety of assessments including essays, journals, oral quizzes, projects and presentations.

FINE & PERFORMING ARTS

Creative problem solving and new avenues of self-expression are at the core of Wilbraham & Monson Academy's Fine & Performing Arts (FPA) program. We offer a full range of learning in theater, music and the visual arts, including digital media, which benefit the entry-level student as well as the advanced artist or performer seeking a higher-level experience. We strive to teach students the skills and thought processes that ensure a deeper understanding of both their immediate and global cultural environments. The faculty members in the FPA Department offer in-depth studies of current practices within their respective disciplines. The department encourages personal growth and the pursuit of both individual and collaborative excellence. Therefore, the process is equally as important as the final product. To help achieve this end, courses are tiered allowing students to build both their confidence and their skill level. All of the instructors in the department are working professionals, actively engaged in their art. We believe students are better prepared for the challenges of the 21st century by understanding and engaging in the complex and diverse human expression inherent in these disciplines. *Note: Materials fees may be charged for these courses.*

VISUAL ARTS

Studio Art – Prerequisite to other visual art courses

Trimester

Level: Introductory, prerequisite to other courses in the visual arts unless student has taken equivalent introductory art course
Prerequisite: none

Overview: Students in this course gain an understanding of the fundamentals of drawing, design and three dimensions through studio practice. The course addresses aesthetics, criticism and art history. Students will be assessed on sketchbook assignments, major projects and class participation. \$35 materials fee charged.

Digital Media and Video

Trimester

Level: Introductory
Prerequisite: None

Overview: This course exposes students to the fundamentals of video programming. Students will explore technical, aesthetic and ethical considerations with a view to video production. They will learn to create programming, such as news, arts and social commentary, through various approaches to digital media. The importance of understanding point of view is critical to a more thorough comprehension of our media saturated lives. With information and ideas being increasingly spread by channels such as YouTube, students should have a foundation in this important visual language.

Drawing

Trimester

Level: Intermediate
Prerequisite: Studio Art

Overview: This course is especially designed to improve drawing skills as well as the ability to visually represent an idea. Throughout the course, students will use a variety of drawing materials ranging from pencils to watercolors and collage materials. Using various means of representation, abstract and realistic, students will develop a personal style that they will use to interpret their life in a visual way. Assignments will include practicing drawing skills on their own and researching imagery that will be used in class projects. \$35 Materials fee charged.

Painting

Trimester

Level: Intermediate
Prerequisite: Studio Art

Overview: Students explore the use of paints and color for self-expression and to gain an understanding and appreciation for paint as a medium personally and historically. They will learn basic color theory by doing simple painting studies and progressing to more complex/abstract paintings. Art history is discussed, as well as various techniques of painting. Students are assessed on effort, creativity and the productive use of time to fully explore the medium, as well as the quality of the work produced. \$35 materials fee charged.

Painting 2

Level: Advanced

Prerequisite: Studio Art and Painting

Trimester

Overview: To further explore the use of paint, students build on knowledge and experience to create paintings with much deeper and personal meaning – to understand art is a form of self-expression. The focus is on the review of color theory and development of a personal voice through a series of projects. The course encourages students to develop self-expression and appreciation of paint as a personal and historic medium. \$35 materials fee charged.

Sculpture

Level: Intermediate

Prerequisite: Studio Art

Trimester

Overview: Through studio practice and research students are exposed to a variety of approaches and considerations in order to arrive at a completed piece of work. By direct experience students learn to problem solve material and aesthetic concerns, understand and apply 3-dimensional concepts in a variety of challenges, resulting in a portfolio of work. This course is encouraged for students who wish to pursue AP Studio-3D Design. \$35 materials fee charged.

Ceramics

Level: Intermediate

Prerequisite: Studio Art

Trimester

Overview: This course is an introduction to ceramic construction and glaze techniques. Students will explore various visual problems and ways to solve them with a creative solution. Projects will begin with a brief history, followed by individual research that develops into the creation of the project. Research of images and historical ceramic pieces will serve as visual and functional inspiration for projects. Work will be collectively viewed, discussed and graded using a rubric. Weekly participation grades will reflect a student's effort, productivity, conduct, attitude and clean up habits. \$35 materials fee charged.

Ceramics 2

Level: Advanced

Prerequisite: Studio Art, Ceramics

Trimester

Overview: This is the second course in the ceramic series. After students learn the basics of constructing and glazing in Ceramics, they are ready to start exploring the possibilities clay has to offer. Projects will consist of unique assembling and glazing techniques, exploring conceptual solutions to visual problems. Students will research outside of class to gain inspiration and understanding of the cultural significance of ceramics, which they will use for their class projects. \$35 materials fee charged.

Ceramics 3

Level: Advanced

Prerequisite: Studio Art, Ceramics 1 and 2

Trimester

Overview: Description to come.

\$35 materials fee charged.

Photography

Level: Intermediate

Prerequisite: Studio Art

Trimester

Overview: Students learn the fundamentals of traditional darkroom photography through work with the SLR camera and in the darkroom, gaining experience in how an image is formed and printed. Students will also develop awareness of composition, subject matter, and lighting. *Black & White Photography* by Henry Horenstein is the text. Daily effort, projects and a willingness to explore the medium are important to success in this course. \$50 materials fee charged.

Advanced Photography

Trimester

Level: Advanced

Prerequisite: Studio Art, Photography

Overview: Students will build upon existing knowledge, continue to develop skill in the darkroom, and increase technical understanding with various cameras while striving to deepen creativity. While working in the darkroom to demonstrate basics and refine printing, students will also apply their knowledge of composition, subject matter, and lighting. Students will produce a portfolio of work. \$50 materials fee charged.

Digital Photography

Trimester

Level: Intermediate

Prerequisite: None

Overview: This course will help students to understand and apply the creative processes involved in creating imagery for web or print while considering the visual impact of the Internet on our lives. Through various projects students will learn Adobe Photoshop and Lightroom basics to manipulate and manage files in computer labs. Each student will produce a digital portfolio that combines photography with design basics. Weekly preparation and participation are important.

Prerequisite: Studio Art

Fashion: Design Studio

Trimester

Level: Intermediate

Prerequisite: Studio Art

Overview: This course will give students a foundation in figure drawing through various methods. Students will learn and practice basic fashion illustration techniques using various media. The creation of original ideas will be explored through various methods and prompts in order to generate new ideas. Students will use these new ideas to design clothing or a "collection" to be presented at the end of the course.

\$35 materials fee charged.

Fashion: Production Studio

Trimester

Level: Intermediate

Prerequisite: Studio Art, Fashion: Design Studio

Overview: This course will give students a foundation in garment construction, sewing techniques, fabric and fiber qualities, and the use of a sewing machine. Students will have the opportunity to prepare and produce sewn garments from their own designs. The course will culminate in a fashion show. \$35 materials fee charged.

Fashion: History & Business

Trimester

Level: Introductory Prerequisite: None

Overview: This course takes an in-depth look at the history of fashion and its effects on the industry as well as modern views of clothing. Fashion will be studied through various lenses: the forces of global economics, politics, social hierarchy and how these dictated what people have worn for centuries. We will examine the social and historical aspects that influence these trends, while drawing parallels between various places and times. Students will also learn the what it takes to produce a season or "collection" of clothing. They will create and design their own business ideas through various artistic endeavors, which will be presented at the end of the course.

AP Studio - 2D Design

Level: Advanced Placement, Grade 11 and above. AP exam in May is mandatory. AP exam fee charged.

Prerequisite: Studio Art, at least one additional art course, departmental permission pending student portfolio review

Overview: Through the completion of a range of assignments, students develop individual themes and approaches to a variety of two-dimensional media. With a focus on the elements and principles of art and design, students also develop objectivity, personal critiques and an understanding of the historical and global impact on the arts. The course will prepare advanced art students for the AP exam and the creation of a portfolio for application to study art in college. \$100 materials fee charged.

AP Studio - 3D Design

Level: Advanced Placement, Grade 11 and above. AP exam in May is mandatory. AP exam fee charged.

Prerequisite: Studio Art, at least one additional art course, departmental permission pending student portfolio review.

Students are highly encouraged to take AP Studio-2D Design prior to enrolling in this course.

Overview: This course offers an in-depth exploration of the many aspects of 3D Design. From plaster casts to recyclable materials, we learn how to use materials in order to make our vision clear and accessible. Problem solving is a critical part of this course. Students are expected to experiment and follow through with ideas. Research on designers and sculptors shared through student presentation and response informs and inspires the class. The work culminates in a group exhibit in the gallery. The AP Studio 3D Design exam in May is mandatory. \$100 materials fee charged.

Advanced Studies in Art

Level: Advanced

Prerequisite: Departmental permission. Independent Study Proposals need to be submitted to Deans Office for approval.

Overview: This course offers post-AP art students an opportunity to continue to study and build their portfolio for application to a college art program. The program is built as an independent study, in coordination with the AP Studio art instructor, allowing the student to work in the medium of their choice to build the best portfolio to showcase their skills. Space is extremely limited and students must have completed the AP Studio courses prior to consideration for this option.

PERFORMING ARTS

Academy Repertory Company

Trimester

Level: Beginner to advanced. Students work at varying levels appropriate to their experience

Prerequisite: None

Overview: Conservatory training in the art of acting and all facets of the production of live theatre. This course offers an intense investigation of theatre history, production, style, techniques and methods of acting and design, which include global perspectives. The goal is to enable students to become more adept in all areas of theatrical production through a process of collaboration and individual creative input. Assessments will include independent script reading and analysis essays, ancillary readings and independent projects, and at least one public performance per trimester. *Students are allowed to take this course more than once and receive credit.*

Beginning Guitar

Trimester

Level: Introductory Prerequisite: none

Overview: The purpose of this course is to bring out the guitar player in you. Through traditional guitar notation, students will learn how to read and play music in first position. They will also learn the ever-important chords that a guitar player uses to accompany a singer, play in a band or make other forms of popular music. Students will also become familiar, through research, with the foremost composers of classical and jazz guitar as well as the great innovators of today's electric guitar. Students will learn to play classical music in an ensemble and will also be given the opportunity to learn their favorite songs.

Digital Music

Trimester

Level: Introductory Prerequisite: None

Overview: Digital Music is an introduction to Midi sequencing and Audio Recording. This is a hands-on class designed to give the student a thorough understanding of digital music and midi interface. This course will introduce the concepts of creating digital audio and midi sequencing through the use of software applications. Students will also learn mixing, EQ methodology and mastering as well as production and engineering tactics. The end of the term will culminate in a finished recording designed entirely by the student.

Percussion

Trimester

Level: Introductory Prerequisite: none

Overview: Percussion class is open to all who want to explore the world of melody, harmony and rhythm through the use of percussion instruments that are both pitched and non-pitched. It offers the student the ability to learn and develop the art of instrumental music while promoting the enjoyment and appreciation of a variety of music genres through rehearsals and performance. The class will explore various styles such as: Marching, Classical, Latin and Rock with the possibility of working together to create an original percussion piece.

Academy Singers

Full Year (1 credit)

Level: Introductory to intermediate choral – meets once per week for the full academic year

Prerequisite: none

Overview: This yearlong course is for all students who wish to share their passion for music in a community setting with music selected from various pop music sources, including rock, jazz, musical theater, television and movies. The goals of this course are to develop the ability to be part of an ensemble setting, to learn about vocal skills and harmonization, and to gain confidence in performing in front of others.

Mosaic Harmony

Level: Advanced choral

Prerequisite: Audition

Overview: This course features rehearsal-based class style with periodic discussion and viewing of relevant documentaries. Students will strengthen vocal and ensemble abilities; increase understanding of the challenges of performing music from different traditions; acquire greater understanding of similarities and differences between traditions; and consider how the performance of global music has the ability to foster greater communication within the worldwide community. This is a yearlong course with repertoire pulled from three distinct global music traditions, regions to be selected at the start of each school year.

Music Ensemble (Titan Jazz Ensemble)

Level: Intermediate to Advanced

Prerequisite: Audition and instructor evaluation required.

Overview: This class will explore a jazz repertoire including the various styles of jazz swing, jazz-rock, Latin jazz, and original compositions by the director and student. Students gain practical listening experience by staying in tune with the group in scale warm-ups, rehearsals and concerts, and thus becoming a team player. The goals of the course are to increase the students' knowledge and ability in the performance of jazz music; to increase each individual's understanding of his or her instrument and how it relates to others in a large band setting; to help perpetuate the concept of a rehearsal jazz band and to prepare a concert exciting to both the musicians and the audience. The ensemble will perform public and private functions during the year.

Chamber Ensemble

Level: Advanced

Prerequisites: Audition or departmental permission

Overview: This yearlong class enables students to improve technical abilities on solo instruments and facilitates play in chamber and advanced ensemble groups. The emphasis is on advanced solo and ensemble technique as well as audition repertoire through participation in auditions and public performances. The course aims to broaden each student's solo and ensemble repertoire through performances.

AP Music Theory – Online - Virtual High School

Level: Advanced Placement - The AP Music Theory exam in May is required.

Prerequisites: Proficiency in playing major and minor scales, reading basic tonal melodies and using proper technique on one or more musical instruments (vocal, orchestral, band). Strongly Recommended: At least one semester of practice writing traditional music notation with proper technique. At least one semester of keyboard instruction, including scales and triad formation. This course has VHS fees.

Overview: This course is designed to give the student an understanding of music theory, sight-reading and aural skills that is equivalent to that of a first-year college music student. It is also designed with the explicit purpose of preparing the student for the AP[®] Exam in Music Theory. The course content and presentation will adhere to the guidelines set forth by the College Board in the Music Theory Course Description. The course will cover: the fundamentals of traditional melodic and harmonic composition through the early 20th century; multiple techniques for melodic, harmonic and formal analysis; an introduction to two- and four-voice counterpoint; an introduction to jazz, blues and non-Western techniques; and the basics of orchestration. In addition, students will be trained to sight-read melodies in major and minor keys, with limited chromatic alteration. They will also perform listening exercises for the purposes of memorizing and notating specific intervals, scales, chords, rhythms, melodies, and progressions.

HEALTH AND WELLNESS

Health education is an essential aspect of the Wilbraham & Monson Academy education as it allows students to connect knowledge from all disciplines with practical application. The Health Department is committed to the development and implementation of an enriching and engaging curriculum for all students. As students progress in grade, the Health courses spiral on the important topics, including physical, mental, emotional and social health. Students are supported in their efforts to apply knowledge and behaviors toward achieving wellness and maintaining a healthy lifestyle.

Freshman Foundations

(.5 credit) Trimester

Level: Grade 9, required

Overview: This course is designed to help freshman understand themselves as individuals, understand their role in a global community and make informed choices related to their health, interaction with others and daily responsibilities. Freshmen Foundations meets four periods per week over the course of the trimester. In class, students are engaged in activities to help enhance their academic strategies, which include time management, organization, presentational development, study habits and note-taking. In addition, the Grade 9 class completes the online Brainology program, which helps students develop Growth Mindset thinking. Through this program students learn about brain functioning and engage in lessons that explore challenges, setbacks, resiliency and personal growth. Anatomy, reproduction, STDs, contraceptives, pregnancy and abstinence are covered in this unit. Finally, we also attend a seminar that displays the social norms of gender identity. A guest speaker comes to the WMA campus to help with gender identity awareness.

Sophomore Health Seminar

No Credit

Level: Grade 10, required

Overview: Sophomores will engage in the health and wellness curriculum through seminar-style lectures by guest speakers. The seminars will cover three topics: mental health, substance use and abuse, and sexual health. Guest speakers who are experts in the field will engage with and educate our students.

Health 11

(.5 credit) Trimester

Level: Grade 11, required

Overview: This course is designed to enhance personal health and wellness through the discussion of mental health, positive psychology, sexual education and personal identity. The focus of this course is the development of identity, personal values and a goal-oriented mindset. Students will meet twice per week over the course of one trimester. Students are graded on in-class assignments.

Health 12

(.25 credit) Trimester

Level: Grade 12, required

Overview: This course is designed to promote safe and healthy decision making as members of the WMA community and beyond. The focus of this course is to prepare students for their transition to college through the discussion of personal health, substance use, mental health and life skills. Students meet twice per week over the course of four weeks. Students are graded on in-class assignments.

ADDITIONAL COURSES

WRITING WORKSHOP

2-TRIMESTER (2 CREDITS)

Level: As recommended; Writing Workshop assists students in need of writing support

Prerequisite: teacher recommendation

Overview: Through a collaborative environment, students learn the skills necessary to develop an effective planning, writing, and revision process. Ongoing revision of a digital writing portfolio allows students to develop and apply an array of writing techniques to a variety of writing forms; increase organization; and learn to use more sophisticated expression, word choice, and advanced grammatical structures. This course is two trimesters and is offered in addition to a student's traditional English class and focuses on the student's individual writing needs. Writing Workshop may be recommended in place of Writing Foundations.

College Counseling Seminars (required, no credit)

This series of courses has been developed by the College Counselor to aid our students in researching and selecting the colleges or universities that will best meet their needs and to assist them in the process of application. These seminars will be scheduled outside of the academic day.

Sophomore Seminar

Sophomore Seminar classes are offered by the College Counselors during the spring trimester. These classes will focus on a variety of topics including the importance of self-reflection in the college process; strategies for developing a strong personal statement; and an introduction to Naviance, WMA's college counseling software. This course has been designed to help our students find educational opportunities – primarily programs of study in postsecondary institutions – that are consistent with their occupational interests. All sophomores are administered the Self-Directed Search Assessment.

Junior Seminar

These classes meet during the winter trimester. Students meet in a small group setting with a College Counselor and are provided an in-depth exploration of the college admission process. Students will learn how to research and identify colleges that are a good “match,” how to navigate Naviance and a college website, how to complete the Common Application, brainstorm essay topics and work on the development of an effective personal statement. Students will create a Common Application account as part of the class.

Senior Seminar

By the fall of senior year, our focus turns to one-on-one meetings with our students. A number of required classes are offered to review the Common Application, to instruct students how to “link” their Common Application and Naviance accounts (a necessary step for the submission of their online applications), to understand the various application options (Early Decision, Early Action and Priority) and to address other important topics. Seniors will also have the opportunity to meet with college admission officers who visit our campus each fall.