EMMA WILLARD
SCHOOL

COURSE CATALOG
2026-2027

OUR MISSION

Honoring our founder's vision, Emma Willard School proudly fosters in each young woman a love of learning, the habits of an intellectual life, and the character, moral strength, and qualities of leadership to serve and shape her world.

CONTENTS

Program Vision **3**
Overview **4**
Graduation Requirements 4
Course Load and Homework 6
Special Fees 2026–2027 6
Advanced Studies 7
READY Seminar 8
Tech Essentials 9
English Support 9
Guidelines for Reading Course Offerings 9
Course Offerings **11**
Arts Department 11
Emma Artists Program 11
Dance 12
Music 15
Music Lessons 15
Theatre 17
Visual Arts 20
Athletics and Physical Education Department 25
Interscholastic Athletics 25
After School Physical Education (ASPE) 26
Dance 26
Movement Practicum 26
Swimming Proficiency Requirement 26
English Department 29
Experiential Learning Department 35
Jestermester 35
Practicum 36
STEAM 38
Signature 38
History and Social Science Department 41
History Requirements 41
Courses in the Required 9th-, 10th-, and 11-th Grade Sequence 41
History and Social Science Electives 44
Language Department 49
Which Language Should You Choose? 49
Language Placement 50
Graduation Requirements 50
Continued Learning 50
Language Exemptions 50
Chinese 51
French 52
Latin 54
Spanish 56
Mathematics Department 59
Placement 59
Guidance on Summer Study: Math 59
Common Course Sequences 60
Science Department 67
Which Science Course Should I Take Next? 67
Graduation Requirements 68

EMMA
2024

Program Vision

INTELLECTUAL FLEXIBILITY

Emma Willard School strives to educate a generation of learners ready and able to address the most pressing issues of their time. During their time at Emma, students develop the intellectual flexibility to consider big questions and to work to solve big problems.

PURPOSE & COMMUNITY

Fundamental to personal wellbeing is the life-long exploration of one's self and one's contribution to the world. The Emma curriculum fosters a sense of purpose in each student by emphasizing relevance, impact and community connection.

EQUITY & JUSTICE

Living and learning in a global and inclusive community requires persistent and purposeful practice, exposure to and understanding of the global community, and the skills necessary to build and sustain equity and justice in the world.

Overview

GRADUATION REQUIREMENTS

Listed below are the requirements by department. Nearly all students elect more courses than the requirements demand.

ARTS DEPARTMENT

For entering 9th graders, successful completion of 2 credits of arts electives; 1 of these credits must be completed by the end of 10th grade; at least one course must be a performance course, and at least one course must be a visual arts course. For entering 10th graders, successful completion of 1 credit of arts electives at Emma Willard; at least one course must be a performance course, and at least one course must be a visual arts course. For entering 11th graders, successful completion of 1 credit of arts courses at Emma Willard with no distribution required among the arts.

ATHLETICS AND PHYSICAL EDUCATION DEPARTMENT

All students must take physical education classes or their equivalent in team sports or dance all year during 9th, 10th, and 11th grade. 12th graders are required to take 8 to 10 weeks of physical education classes or the equivalent. All students must complete a swimming and water safety proficiency test.

ENGLISH DEPARTMENT

Successful completion of four credits of English. During 9th, 10th, and 11th grades, students must take the grade-level English courses I, II, and III. In 12th grade, each student must choose one English elective in the fall and one in the spring or a yearlong (AS) elective.

HISTORY AND SOCIAL SCIENCE DEPARTMENT

Successful completion of three courses in history and social science or their equivalents, including one credit of United States history taken at the 11th- or 12th-grade level.

LANGUAGE DEPARTMENT

Successful completion of the third (300) level of a single language following an initial placement test at Emma Willard. International students who are multilingual are not required to take a language at Emma Willard School in order to graduate. You can read about language graduation requirements in more detail here.

MATHEMATICS DEPARTMENT

Successful completion of the mathematics sequence through the third level following the sequence: Algebra I (M-125), Geometry (M-225), and either Algebra II and Trigonometry (M-325) or Algebra II and Trigonometry with Non-Routine Problems (M-326).

SCIENCE DEPARTMENT

Successful completion of three credits of laboratory science: one course of Foundations in Environmental Science (S-125) or Physics (S-100 or S-101), one course of Chemistry (S-200 or S-201), and one course of Biology (S-310). For students entering in 10th or 11th grade, successful completion of two credits of laboratory science including chemistry and biology during their high school career. Students admitted for the spring semester will be excused from the corresponding requirement (e.g. admitted in January of ninth grade, excused from S-125) and will work with the department chair to determine current and future coursework. You can read about science graduation requirements in more detail here.

YOUR SCHEDULE

Emma Willard is committed to students gaining experience in making academic choices. The following are typical schedules for each grade:

9TH-GRADE PROGRAM

- Arts semester course(s)
- English I
- Classical Mediterranean History and a regional history elective (African History, East Asian History, or Indian History)
- Language
- Mathematics
- Foundations in Environmental Science
- Physical education class, unless exempted through dance class or interscholastic teams
- Grade 9 READY Seminar
- Tech Essentials

10TH-GRADE PROGRAM

- Arts semester courses
- English II
- Regional history elective (European History, Latin American History, or Middle Eastern History) and Contemporary World History
- Language
- Mathematics
- Chemistry Essentials or Chemistry
- Physical education class, unless exempted through dance class or interscholastic teams
- Grade 10 READY Seminar
- Tech Essentials (if incoming sophomore)
- Up to 1 Advanced Studies course

11TH-GRADE PROGRAM

- Arts semester courses
- English III
- United States history
- Language
- Mathematics
- Biology
- Physical education class, unless exempted through dance class or interscholastic teams
- Grade 11 READY Seminar
- Tech Essentials (if incoming junior)
- Up to 2 Advanced Studies courses

12TH-GRADE PROGRAM

For graduation, a 12th grader must complete any distribution requirement that remains unfilled and choose one elective from the English Department in each semester or a yearlong (AS) English course. A 12th grader must also fulfill an 8 to 10 week physical education requirement either through gym class or an acceptable substitution. Further, a 12th grader must minimally carry 2.5 credits per semester, 5 credits for the year. Grade 12 students enroll in Grade 12 READY Seminar. Grade 12 students may enroll in up to 3 Advanced Studies courses.

GRADING SYSTEM

There are two grading systems in use at Emma Willard.

For most courses the grading system ranges from A to No Credit (A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and No Credit). Unless otherwise indicated in the course description, this grading system is used. For some courses a grading system of Credit/No Credit is used; in these courses only those two grades are used.

In visual arts courses, a student may elect to take a course for a letter grade or as Credit/No Credit. To use the letter grade option, the student must register the grading choice with the art teacher. The student cannot then change this arrangement. For fall-semester courses, the choice of a letter grade must be made by the end of the third week of fall semester. For spring-semester courses, the choice of a letter grade must be made by the end of the third week of spring semester.

Ninth graders receive grades of Credit/No Credit for their semester at Emma Willard. In the second semester, freshmen receive letter grades that are recorded with the registrar and reported on transcripts. Comprehensive final exams or culminating experiences may be included in this second semester grade.

COURSE LOAD AND HOMEWORK

Courses are assigned credits as follows:

- 1.5 credit = Advanced Studies course
- 1 credit = non-AS course
- .5 credit = art course

A student customarily carries 5–6 credits per year: 2.5–3 credits per semester. A student must carry a minimum of 2.5 credits per semester. A year course designated as 1 credit or a semester course designated as .5 credits typically requires 5-6 hours of work per week, counting time both inside and outside of the classroom. A year course designated as only .5 credits typically requires 3 hours per week, counting time both inside and outside of the classroom. A 1.5 credit year course typically requires 6–7 hours per week, counting time both inside and outside of the classroom. The actual time required varies from student to student and week to week.

SPECIAL FEES 2026–2027

Additional fees are charged for certain types of instruction.

In some courses, for example those in visual arts, a materials fee is charged to the student's account. Music lessons require a special fees form (available from the arts department chair). Students can sign up for music lessons while planning their programs, but these courses are not added to student schedules without parental signatures on the special fees form. Student accounts are used for books and supplies authorized by classroom teachers. Athletic uniforms and supplies for dance classes and physical education may also be charged to these accounts.

ADVANCED STUDIES

Emma Willard School offers a unique Advanced Studies program to instill in each student a wide breadth of knowledge and the ability to demonstrate mastery of learning in a variety of ways.

Several Advanced Studies courses largely align with the Advanced Placement™ curriculum; however, Advanced Studies courses will not prepare students fully for AP exams. Advanced Studies teachers provide students with recommendations for additional resources for self-study to allow students to prepare fully for the AP exam.

To ensure students engage with a range of rigorous offerings across the program, the school offers guidelines on the number of AS courses a student may take in each grade year. Grade 9 students generally do not enroll in AS courses. Grade 10 students may choose one AS course, Grade 11 students up to two, and Grade 12 students up to three. Students seeking to exceed these guidelines may petition to enroll in additional AS courses.

Each year, Emma Willard students participate in advanced study in the following subjects:

- Art History
- Biology
- Calculus AB
- Calculus C
- Chemistry
- Chinese Language
- Comparative Government and Politics
- Computer Science A
- Computer Science Explorations
- Economics
- Entomology
- French Language
- Latin
- Literature
- Physics I
- Spanish Language
- Statistics
- United States History

READY SEMINAR

At Emma Willard, we believe that in order to be ready to serve and shape their world, our students must learn to practice care and understand purpose for themselves, then envision and enact those skills in their communities, and the broader world. The READY Program is a four-year curriculum designed to support this learning by creating a thoughtful and experiential practice on "how to human."

GRADE 9: EMMA READY

Emma READY supports students' transition to Emma Willard School and helps them develop skills that are critical and relevant in a student's high-school life. This includes finding balance as a healthy/well individual at an academically rigorous school and helping students feel a sense of self and belonging in the community.

GRADE 10: READY SEMINAR

Grade 10 READY builds on 9th grade lessons to support a deeper understanding of personal development and wellbeing at Emma. Students will continue to learn about key areas of their health including learning about risk-taking behaviors. Students will practice how to develop healthy relationships across many areas of their lives. This will include navigating conflict and challenging conversations. Students will explore how to define purpose in our lives now and as a guide for the future.

GRADE 11: READY SEMINAR

Grade 11 READY asks students to consider how they will engage in the world outside of Emma. Students will continue to explore our health curriculum adding in layers of cultural and societal context. 11th grade begins the college exploration process, considering the values and priorities students will employ in finding a college match, and considering expectation and stress management throughout the process.

GRADE 12: READY AFTER EMMA

READY After Emma supports students in their graduating year to finalize their college applications and choices. We will then turn our focus to life after Emma and have the opportunity to reflect on the Emma Willard experience where students will consider what they are taking away from Emma, and what they are leaving behind.

HEALTHY LIVING AND LIFE SKILLS

Emma Willard School's healthy living and life skills curriculum is embedded throughout the READY Seminar program and provides students with knowledge about a variety of topics related to health and wellbeing. Through the use of open-ended questions, interactive activities, discussions and guest speakers, students explore the importance of personal responsibility and are given tools to gauge their levels of wellbeing, to identify areas for growth, and to examine how their beliefs impact their personal decision-making. In each year of the READY Seminar, the curriculum covers topics including healthy relationships, nutrition, exercise, stress management, emotional and mental wellbeing, sexual and reproductive health, drugs and alcohol, and addiction.

TECH ESSENTIALS

The goal of the Tech Essentials class is to help all incoming students learn foundational technology skills that are essential to working with technology as a student here at Emma Willard, as well as in the world. The course is meant to support each student in gaining the same baseline skills and knowledge to be successful throughout their first year and beyond. Fostering an environment where students support and learn from each other, Tech Essentials accommodates the wide range of technology skills students arrive with. Students will answer essential questions such as "How do I best create content for my classes?", "How do I analyze and create a potential solution to a technical difficulty?", and "How do I express my creativity and share my thoughts using tech?" This course is taught in a hybrid model where all students will meet in person the first few weeks and then have the option to complete the modules in person or asynchronously on their own.

ENGLISH SUPPORT

ACADEMIC WRITING FOR MULTILINGUAL LEARNERS

This course is designed to help students improve their English language skills through concentration on reading, writing, speaking, and listening. This course is taught by a member of the Capital Region Language Center who specializes in teaching English as a new language. Students may be placed in a one or two-year sequence of English support based on their demonstrated level of proficiency.

EFFECTIVE COMMUNICATION FOR MULTILINGUAL LEARNERS

This course is designed to help students improve their conversational English language skills. This course is taught by a member of the Capital Region Language Center who specializes in teaching English as a new language. Students may be placed in a one or two-year sequence of English support based on their demonstrated level of proficiency.

GUIDELINES FOR READING COURSE OFFERINGS

PLACEMENT OF STUDENTS IN COURSES

In courses that are taught in more than one section, the school reserves the right to place students. Neither students nor their families are allowed to choose class sections by teacher, classmates, etc.

RESTRICTIONS

Each course description includes a notation of the class levels to which the course is restricted to. There may be exceptions.

Course Offerings

ARTS DEPARTMENT

The Arts Department offers a variety of courses in music, theatre, dance, and visual arts. Students have the opportunity to learn vocabulary and problem-solving and performing techniques that are unique to each discipline. Our course offerings are designed for students of all levels of interest and proficiency so that students are able to explore new areas as well as study a particular art form in depth.

GRADING OPTION

Arts courses are graded on a Credit/No Credit basis, but for the visual arts courses, a student may elect to take a course for a letter grade. To use this option the student must register the grading choice with the teacher at the appropriate deadline. This arrangement cannot then change during the semester.

COURSE NUMBERING

The first digit indicates level, not the grade of the student for whom the course is intended: thus, a 100 course is for the inexperienced student of any age, and a 300 course might well suit a younger, experienced student. The second digit indicates broad subdivisions of study within the division: 1 and 2—visual arts; 3—dance; 4—theatre; 5—music; 7—photography; 8 and 9—interdisciplinary

EMMA ARTISTS PROGRAM

The Emma Artists Program is for advanced students in dance, music, theatre, or visual arts who would like to pursue further advanced study. Each year, students perform and/or show their work to the community. As students move through the program, projects grow in scope and depth.

A-299 Special Project in the Arts in the Performing Arts
Year 0.5 credit
This course is for students who have exceeded the levels of our arts offerings and wish to continue study in a particular arts discipline. This course could serve as preparation for the Emma Artists Program should the student choose to pursue their studies in the arts. Prerequisites: Students in music require permission of both the instructor and the Arts Department Chair. This course may be repeated for credit.

Students in theatre require permission from the instructor and Department Chair and should have completed courses through Acting: The Art and Craft of Play, Theatre Company—A

A-399A Emma Artists I: Performing Arts
Year 0.5 credit
This course is for advanced performing arts students with significant arts training who wish to undertake a terminal arts project. Students work with a team of faculty across the arts disciplines. Examples of culminating projects are a performing arts recital, an advanced dance project or an advanced theatre performance. This course requires permission of both the instructor and the Arts Department chair.

Prerequisite: Special Projects in the Arts or by permission of the instructor

A-399B Emma Artists I: Visual Arts
Year 1 credit
This course is for advanced visual arts students with significant arts training who wish to undertake a terminal arts project. Students work with faculty to exhibit their work at the conclusion of the year. The course requires commitment

and a willingness to experiment in new directions and media. Students work with the instructor for personalized assignments and suggestions. Drawing, painting, mixed media, new media, installation, and sculpture are all open for exploration. Through slides and videos students examine contemporary approaches to making art and connections to their own studio work. Although intended for seniors, this course is also open to juniors. This course requires permission of both the instructor and the Arts Department chair.

Prerequisite: Advanced Studio Art, Advanced Media Arts, Advanced Sculpture and Ceramics or by permission of the instructor
Restricted to: 11/12

A-499A Emma Artists II: Performing Arts

Year 0.5 credit
This course is for advanced performing arts students with significant arts training who wish to undertake a terminal arts project. Students work with faculty from their specific discipline of study. Examples of culminating projects are a performing arts recital, an advanced dance project or an advanced theatre performance. This course requires permission of both the instructor and the Arts Department chair.

Prerequisite: Emma Artists I or by permission of the instructor
Restricted to : 11/12

A-499B Emma Artists II: Visual Arts

Year 1 credit
This course is for advanced visual arts students with significant arts training who wish to undertake a terminal arts project. Students work to exhibit their work at the conclusion of the year. This requires commitment and a willingness to experiment in new directions and media. Students have individual meetings with the instructor for personalized assignments and suggestions. Drawing, painting, mixed media, new media, installation, and sculpture are all open for exploration. Through slides and videos students examine contemporary approaches to making art and connections to their own studio work. Although intended for seniors, this course is also open to juniors. This course requires permission of both the instructor and the Arts Department chair.

Prerequisite: Emma Artists I: Visual Arts or by permission of the instructor
Restricted to: 11/12

A-599A Emma Artists III: Performing Arts

Year 0.5 credit
This course is for advanced performing arts students with significant arts training who wish to undertake a terminal arts project. Students work with faculty from their specific discipline of study. Examples of culminating projects are a performing arts recital, an advanced dance project or an advanced theatre performance. This course requires permission of both the instructor and the Arts Department chair.

Prerequisite: Emma Artists II or by permission of the instructor
Restricted to: 12

DANCE

A-134 Core Training Fundamentals

Fall 0.25 credit
The human body is an amazingly efficient instrument giving us the ability to accomplish extraordinary feats or simply carry us from one place to another. Every activity we pursue requires the activation of our muscles and the support of our skeleton; yet if we do not support these actions with informed alignment and intelligent muscular training, injury can result. This fundamental training course introduces students to exercises geared to strengthen their core while developing greater flexibility and balanced alignment. Training will consist of a combination of techniques including Pilates exercises, resistance stretching, therabands, balls, foam rollers, and magic circles. Whether you are a three-season athlete, a prima ballerina, a person who spends hours practicing a musical instrument, or someone who takes a walk once a week, balanced alignment and movement strength and efficiency will improve your performance. No experience or previous training is necessary. This course may be repeated for credit.

A-139 Hip Hop

Can be taken in Fall, Spring, or both semesters
0.25 for one semester, 0.5 credit for both semesters

Hip Hop is a street style that can be found around the world that combines freestyle movement and music. Students will be asked to explore movements and rhythms that may be new to them to create a dynamic experience of both dance and music. Class activities can include learning set movement, improvisation, viewing and discussing dance, and some journaling. All students participate in the development of choreography for a performance in the Dance Assembly. No experience is required—just a willingness to have fun. This course may be repeated for credit.

Fulfills prerequisite for Intermediate Contemporary Dance and can fulfill the prerequisite for Intermediate Ballet (with instructor approval).

A-231 Intermediate Contemporary Dance

Year 0.5 credit

Intermediate Contemporary Dance expands the student's mastery of dance skills beyond the Introductory level. Dance sequences and exercises are designed to increase the students' familiarity with modern dance styles, while developing their understanding of space, musicality, and dynamics as tools for creative expression. Class activities include warm-up exercises, movement studies, discussions, written observations and critiques. All students participate in the development of contemporary choreography for a performance in the Dance Assembly.

Prerequisite: Permission of the instructor

A-235 Intermediate Ballet

Year 0.5 credit

Students practice the techniques of ballet performance at the intermediate level. Emphasis is placed on increasing strength, flexibility and articulation consistent with ballet performance requirements. Students work with the musicality of the ballet vocabulary to help transform their technical study into an expressive form. This course may be repeated for credit.

Prerequisite: Permission of the instructor

A-331 Advanced Contemporary Dance

Year 0.5 credit

Advanced Contemporary Dance expands the student's mastery of dance skills beyond the intermediate level. Dance sequences and exercises are designed to increase the students' familiarity with modern dance styles, while developing their understanding of space, musicality, and dynamics as tools for creative expression. Class activities include warm-up exercises, movement studies, discussions, written observations and critiques. All students participate in the development of contemporary choreography for a performance in the Dance Assembly. This course may be repeated for credit.

Prerequisite: Permission of the instructor

A-335 Advanced Ballet

Year 0.5 credit

Students practice the techniques of ballet performance at the advanced level. Emphasis is placed on increasing strength, flexibility, and articulation consistent with ballet performance requirements. Students work with the musicality of the ballet vocabulary to help transform their technical study into an expressive form. This course may be repeated for credit.

Prerequisite: Permission of the instructor

A-340 Dance Choreography/Performance Workshop

Year 0.5 credit

In this yearlong course, students will investigate the elements of choreography through discussions, video screenings, solo and group movement studies. Students will collaborate in the choreography of their peers, participating in rehearsals and feedback sessions of the evolving choreography. In the spring semester, students will practice their choreographic skills by choreographing original dances for presentation in a performance concert.

Prerequisite: Currently enrolled in an advanced dance class and permission of the instructor.
Restricted to: 10/11/12

MUSIC

MUSIC LESSONS

Individual instruction in vocal and instrumental study is provided for a special fee. The school attempts to provide instruction in any instrument requested, either on campus or off campus through the Practicum program. If a student wants to study an instrument other than piano or organ, the student must provide their own instrument; it must be of good quality and in good working order. It is assumed that the student has a genuine interest in the instrument (or voice), that the student wants to progress steadily, and that the student is willing to devote enough time to regular practice to ensure progress. Instruction in cello, flute, organ, piano, viola, violin, and voice is available on campus. Students must complete the "Instruction in Music" form available on MyEmma. Students in their first year at Emma Willard may not take more than one course of individual instruction in music.

VOCAL PERFORMANCE

A-150 Choir
Year 0.5 credit
Do you love to sing? Choir provides opportunities for students of all levels of experience and abilities,to develop their vocal technique in a group atmosphere. We sing a variety of pieces from early music to the present day, representing many cultures, genres and languages. The ensemble performs in concerts throughout the year, including Eventide in December and the spring concert. This course is open to all interested students and may be repeated for credit.

A-350 Inner Choir
Year 0.5 credit
The Inner Choir is a select vocal ensemble whose members are drawn from the choir, who would like to engage in even more musical collaboration and growth. This group performs works of many cultures and genres appropriate for an advanced choral ensemble. This course may be repeated for credit.

Co-requisite: Choir (A-150)

A-354 Semiquavers
Year 0.5 credit
This vocal ensemble is for highly motivated singers who are able to work both independently and collaboratively to study a variety of music from different musical periods and cultures. The Semiquavers perform throughout the year. This course may be repeated for credit.

Co-requisite: Choir (A-150) and Inner Choir (A-350)
Prerequisite: Invitation of the instructor

INSTRUMENTAL PERFORMANCE

A-257 Orchestra
Year 0.5 credit
The orchestra repertoire focuses on instrumental music of many genres. Placements are held at the beginning of the year. A student who is new to Emma Willard should prepare a short selection that demonstrates their playing level and ability. Players must provide their own instruments. Individual practice is expected. Students are encouraged to take private lessons in conjunction with this course. This course may be repeated for credit.

A-358 Chamber Orchestra
Year 0.5 credit
Participation in this ensemble is by audition. A student must be in the orchestra to be considered for this group. Its members are highly motivated students who wish to expand their level of playing and knowledge of classical chamber ensemble repertoire. This course may be repeated for credit.

Co-requisite: Orchestra (A-257) and acceptance by audition

MUSIC APPRECIATION

A-352 Music Appreciation: The World of Music
Fall 0.25 credit

What is the impact of music on the world around us? In this course, students will explore musical works across cultures and time periods. Genres can include folk music, rock, pop, musical theatre, opera, and orchestral/instrumental music, based on student interest. In addition, we will study form and structure as well as composers/songwriters, performers and cultural influences. No experience or previous study is required. This course may be repeated for credit.

THEATRE

A-141 Acting: The Art and Craft of Play
Fall and Spring 0.5 credit
This course explores physical action, working with props, the environment and a variety of dramatic activities and texts. Students will develop their imagination, focus, concentration and emotional openness; exercises for physical and vocal freedom, and listening techniques in order to create an organic moment to moment reality. The course will culminate with a final in-class performance of a theatrical scene.

A-149 Acting For The Camera: The Beginner's Guide to Screen Acting
Spring 0.5 credit
This introductory film acting course is designed for students with previous acting or public speaking experience who are ready to explore the subtleties and technicality of on-camera performance. This course will cover learning to internalize emotions and communicate through stillness, thought, and minimal movement as you explore effective ways to connect authentically with a scene partner while maintaining technical awareness of the camera. By the end of this course, you won't just be an actor; you'll be an on-camera powerhouse with a solid foundation in screen techniques and the confidence to engage in future on camera acting projects and productions. The course will culminate with a filmed performance of a theatrical scene.

Prerequisites: Public Speaking: The Art of Expressive Speech and Storytelling/ Acting: The Art and Craft of Play/ Theatre Company—A, or permission of the theatre director

A-143 Technical Theatre Support
Year 0.5 credit
Students who are interested in pursuing their interest and skills in technical theatre can do so in this course. Students will use their gained knowledge of theatrical lighting, sound, stage management, and backstage work gained during class time to support all-school assemblies and Morning Reports throughout the school year. Students will need somewhat flexible schedules after school hours to accommodate the occasional tech rehearsal associated with school-wide events.

A-144 Technical Theatre Production & Design
Can be taken in Fall, Spring, or both semesters
0.25 for one semester, 0.5 credit for both semesters
Students who are interested in moving into leadership roles and exploring more complex aspects behind the scenes of a theatre production can do so in this course. Students will choose a specialized track to refine their skills, focusing on either Scenic, Lighting, Sound, or Prop Design OR focusing on Stage Management as a Stage Manager or Assistant Stage Manager. While reviewing all technical theatre fundamentals, students will fill vital leadership positions for the school's play productions and provide essential additional technical support for all-school assemblies and performances throughout the year. Because this course provides the leadership crew for play productions, students will need flexible

schedules after school hours and on occasional weekends to accommodate tech rehearsals and evening performances. This is a semester based course for those who have previously taken Technical Theatre Support and students who have participated in a minimum of two Theatre Company productions as crew members may also take this course. This class takes place after school. Students may add this class midway through the year with permission of the instructor for 0.25 credit.

Prerequisite: Technical Theatre Support (A-143). Theatre Company—C (A-241C)
Restricted to: 10/11/12

A-148 The Art of Voiceover Acting

Fall 0.5 credit
This introductory voiceover acting course is custom designed for students with previous acting or public speaking experience who are ready to explore the dynamic, exciting world of voiceover! In voiceover acting, your voice is the entire performance. This course will focus on speech and storytelling, techniques, and character creation (audio style). Throughout this course, students will discover how to build and maintain distinct characters for animation, video games, and audiobooks using vocal pitch, rhythm, and accent. By the end of this class, students will be equipped with a toolkit of introductory voice acting techniques and the confidence to read commercial copy, narrate a film/ tv piece, and bring animated characters to life! The course will culminate with a final audio performance of a theatrical scene.

Prerequisites: Public Speaking: The Art of Expressive Speech and Storytelling/ Acting: The Art and Craft of Play/ Theatre Company—A, or permission of the theatre director.

A-146 Actor as Creator: Special Project in Theatre Arts

Fall and Spring 0.5 credit
This course offers acting students the opportunity to explore styles of theatre, in addition to being introduced to the basics of directing, playwriting and dramaturgy. The main objective of this course is to prepare students to develop an idea into a live performance art piece. Students will practice how to think critically about performance and find their unique form of expression. Students are guided through a specific creative process the result of which is presented to an audience at the end of the semester. This course may be repeated for credit.

Prerequisites: Public Speaking: The Art of Expressive Speech and Storytelling/ Acting: The Art and Craft of Play, Theatre Company—A, or permission of the theatre director.

A-147 Public Speaking: The Art of Expressive Speech and Storytelling

Fall and Spring 0.5 credit
“Public speaking is one of the most common fears of the human race. ” Have you heard this

dictum before? This course is about conquering that fear by harnessing it and aims to give students the lifelong, invaluable skill of speaking clearly and comfortably in public. By the end of the semester, students become aware of personal speech characteristics; improve posture, diction and other mechanics of speech; cultivate poise and self-confidence; and develop audience awareness and self-awareness. This is a practice-oriented course. Societal and current events relative to the course are addressed as a means to explore and refine a variety of types of speech, including informative, persuasive, demonstrative, and entertaining. The course will culminate with a memorized final speech performance.

A-241A Theatre Company—A

Fall and Spring 0.25 credit
Arts credit is granted to participants in mainstage school play productions; typically, there are two productions per school year. Cast members are chosen by audition. As participation is determined by audition, students should not sign up for the class in advance. This course may be repeated for credit.

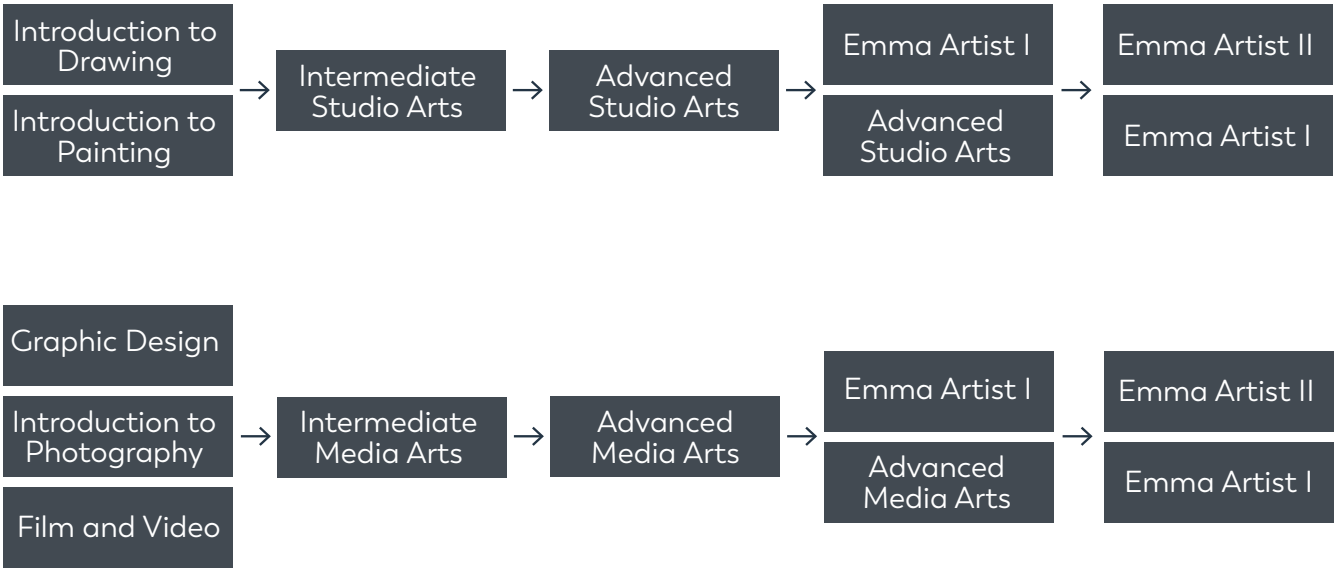
Prerequisite: Students must audition for this course

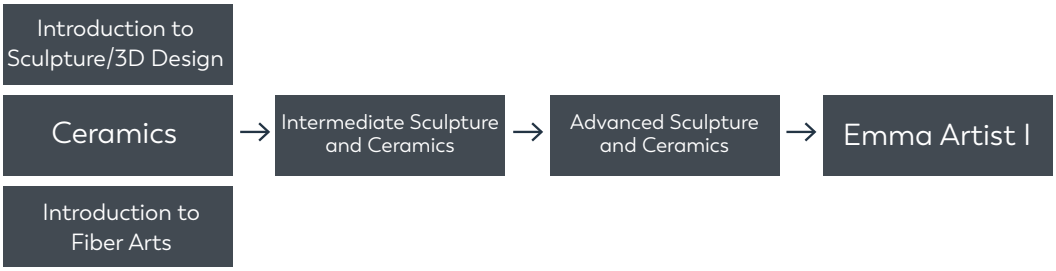
A-241C Theatre Company—C

Fall and Spring 0.25 credit
Arts credit is granted to participants in mainstage school play productions; typically, there are two productions per school year. Crew members are chosen by application and the technical needs for each production. As participation is determined by applications, students should not sign up for the class in advance. This course may be repeated for credit.

VISUAL ARTS

Unless specifically stated in the course description, students have the grading option of letter grades (A through No Credit) or Credit/No Credit. Below is a pathway to show the progression of the visual arts courses.





A-116 Introduction to Drawing
Fall 0.5 credit
If you have ever thought, "I can't draw," this is the course to take! Introduction to Drawing is an excellent starting point for students who wish to learn the fundamental skills of drawing. No experience is necessary, as students will learn to increase both perceptual and observational skills through in-class exercises. Students study both representation and abstraction through both traditional and experimental approaches. The focus of the course is on black and white dry media including charcoal, pencil, and markers. Students learn to critique their work and the work of others in addition to articulating their thoughts through writing. Sketchbook assignments and slides supplement students' understanding of the course.

A-117 Introduction to Painting
Fall and Spring 0.5 credit
In this course, students study the language of painting through color, form, and materials. Technical concepts and personal exploration are emphasized and applied through observational and abstract exercises. Painting with acrylics is the focus as theories of color interaction and compositions are explored. Students learn to critique their work and the work of others in addition to articulating their thoughts through writing. Sketchbook assignments and slides supplement students' understanding of the course. While some previous drawing experience is helpful, no experience in painting is necessary.

A-123 Architectural Sculpture

Fall 0.5 credit

Do you love designing, building and/or sculpting? In this course, students will become familiar with technical aspects and the concept of sculpture, architectural elements in a 3-dimensional form. Students will develop an understanding of how to build in space using line, planes, form, and volume with a variety of different materials. Students will gain an understanding of spatial relationships and the ability to take a 2-dimensional surface and transform it into a 3-dimensional space. Students will work with a variety of materials, which may include materials such as wood, clay, cardboard, paper, spray paint, fiber, laser cutting, metal and found objects. No experience needed. This course was known formally as Intro to Sculpture.

A-124 Introduction to Fiber Arts

Fall 0.5 credit

This is a class where students will become familiar with the technical aspects and the concept of sculpture through the use of fiber arts. Students will develop an understanding of how to work 3-dimensionally with materials such as yarn, fabric, wire, found objects, wool, and/or more. You will be introduced to some basic fiber arts skills, which may include sewing, quilting, needle felting, wet felting, embroidery, or tapestry. Additionally, students are given the opportunity to develop their critical eye and decision-making skills as they begin to form a basis for aesthetic development. No experience needed.

A-125 Ceramics

Fall and Spring 0.5 credit

Have you always wanted to work with clay? This class familiarizes students with the fundamental skills necessary for working with clay along with learning the vocabulary used by ceramic and sculpture artists. Students develop their visual vocabulary while learning a variety of hand-building methods along with an intro to wheel throwing. Additionally, students are given the opportunity to develop their critical eye and decision-making skills as they begin to form a basis for aesthetic development. No experience needed.

A-171 Experimental Photography

Fall 0.5 credit

What does it mean to make a photograph? In this class, you'll step back in time to discover photography before the digital era. You'll build your own pinhole camera, experiment with the cyanotype process, and create cameraless images called photograms. Along the way, you'll also learn the rules of composition and other essential design techniques to strengthen your creative eye. No prior experience is necessary—just bring your curiosity.

A-170 Introduction to Photography

Fall and Spring 0.5 credit

Do you love photography? This beginner-friendly class is perfect for exploring the art and science of taking great photos. Starting with tools you already have—like your smartphone—you'll learn modern techniques and discover the history of photography. You'll spend time in both the digital lab and the darkroom, learning how DSLR cameras work and how to use color, design, and composition to tell visual stories. Class critiques offer a supportive space to improve your skills and grow as an artist. No camera? No problem—equipment is available to borrow. No experience needed.

A-175 Graphic Design

Fall and Spring 0.5 credit

Are you curious about digital drawing, poster design, or animation? This course is a great place to start! You'll explore typography, color theory, layout, and composition while using tools like Adobe Photoshop, Illustrator, and Procreate. You'll work on fun projects like designing a personal logo, creating a unique postcard, and making a short animation. Along the way, you'll learn how to design, edit, and polish your digital creations using desktop Macs, tablets, and iPads. This class is perfect for beginners and sets you up to explore other creative areas like photography and video. No experience is needed.

A-217 Intermediate Studio Art

Can be taken in Fall, Spring, or both semesters
0.5 credit for 1 semester, 1.0 credit for both semesters

This course is for students who are interested in developing their own creative voice in the visual arts. Skills in drawing, color theory, and composition are further developed with the introduction of new techniques. There is a strong emphasis

on self-expression, conceptual problem solving, art evaluation, and individual theme development. The first semester focuses on dry media (pencil, pastel and charcoal), while the second semester is devoted to painting. Regular slides and video lectures supplement studio study. The sketchbook plays an important role in developing preliminary sketches and documenting ideas. Within the structure of regular assignments, students are given more independence and creative license. Students interested in completing a college portfolio should take Intermediate Studio Art for a full year and begin working with art faculty before their senior year.

Prerequisite: Studio Art I: Introduction to Drawing (A-116), Introduction to Painting (A-117) , or permission of the instructor
Restricted to: 10/11/12

A-271 Intermediate Media Arts: Photo, Video and Design
Can be taken in Fall, Spring, or both semesters
0.5 credit for 1 semester, 1.0 credit for both semesters
Are you ready to level up your art? This class builds on what you learned in Photography, Film and Video or Graphic Design, helping you refine your skills and explore your creative potential. You'll take on exciting personal projects with more independence, learning to plan and bring your ideas to life. You'll work across photography, film, and graphic design, trying new techniques and expanding your expertise. We'll also dive into the history and trends in Media Arts to understand how the field has evolved and where it's going. If you need them we have digital and film cameras ready for you! Students interested in completing a college portfolio should take Intermediate Media Art for the full year and begin working with art faculty before their senior year.

Prerequisite: Introduction to Photography (A-170), Graphic Design (A-175), Film and Video (A-279), or permission of the instructor

A-272 Intermediate Sculpture & Ceramics
Can be taken in Fall, Spring, or both semesters
0.5 credit for 1 semester, 1.0 credit for both semesters

This course takes Ceramics and Sculpture and Architectural Sculpture to the next level. An introduction of new techniques and skills in sculpture and ceramics are further developed and explored. There is a strong emphasis on self-expression, conceptual problem solving, art evaluation, and individual theme development. Slide and video lectures supplement the studio study. Sketching and Prototyping will play an important role in developing and documenting preliminary ideas. Within the structure of regular assignments, students are given more independence and creative license. Students interested in completing a college portfolio should take Intermediate Sculpture & Ceramics for the full year and begin working with art faculty before their senior year.

Prerequisite: Introduction to Sculpture (A-123) (formally 3D Design), Ceramics (A-125) or permission of the instructor

A-279 Film and Video

Fall and Spring 0.5 credit

In this course, you will learn the art of visual storytelling through film and video. You will explore filmmaking history, study how directors make creative decisions, and get hands-on experience with video production. You'll try out different styles, like experimental, documentary, and narrative, while learning to use cameras, record sound, and edit videos. Working alone and in groups, you'll create short video projects that focus on storytelling. Our lab has top-notch equipment with Adobe Premiere Pro and After Effects to help you bring your ideas to life. Each project ends with a class screening, where you'll share your work, give feedback, and grow as an artist. No experience is needed.

A-311 Advanced Studio Art

Year 1 credit

This course requires substantial commitment and a willingness to explore new directions and express a personal vision. Students experiment with advanced techniques, learn to document their work, and give written and oral critiques while creating a body of work during the second half of the year. Advanced drawing techniques, unconventional painting processes, and mixed media are all open for exploration. Through slides and videos students examine 20th century and contemporary approaches to painting and drawing. The sketchbook plays an important role in developing preliminary sketches and documenting ideas. This course may be repeated for credit.

Prerequisite: Intermediate Studio Art (A-217)
Restricted to: 10/11/12

A-372 Advanced Media Arts: Photo, Video and Design

Year 1 credit

This course is for Media Arts students who want to push their creativity and improve their skills. You'll build on your experience in photography, film and video, and graphic design to create work that shows your unique voice and vision. The class focuses on your personal goals with one-on-one guidance, group critiques, and inspiring readings. By the end, you will create a portfolio that includes a cohesive project based on a personal theme and a polished artist's statement. This is a full year course to fully explore your ideas and create meaningful work. Need equipment? We've got digital and film cameras ready for you! This course may be repeated for credit.

Prerequisite: Intermediate Media Arts (A-271)
Restricted to: 10/11/12

A-373 Advanced Sculpture & Ceramics

Can be taken in Fall, Spring, or both semesters
0.5 credit for 1 semester, 1.0 credit for both semesters

This course requires a commitment and willingness to explore new directions and express a personal vision. Students explore advanced 3D techniques, learn to document their work, and give written and oral critiques. It is a course for students who are interested in developing their own creative voice in the visual arts. Skills in sculpture and/or ceramics are further explored and developed to fit their own personal style. This is a portfolio-based class. If you are taking this class for a portfolio you need to take both Fall and Spring semesters. By the end of the class students will have created an independent body of work. This course is open to those who have completed Intermediate Sculpture & Ceramics. This course may be repeated for credit.

Prerequisite: Intermediate Sculpture & Ceramics
Restricted to: 10/11/12

GILL
GILL

ATHLETICS AND PHYSICAL EDUCATION DEPARTMENT

Athletics, Physical Education, and Dance provide our students with learning opportunities through the medium of movement and contribute to their overall development by helping them to lead full, active and healthy lives.

GRADES

Courses are graded on a Credit/No Credit basis.

MOVEMENT GRADUATION REQUIREMENT

All students in grades 9-11 must participate in a movement experience for the entire school year. Seniors must participate for eight to ten weeks (this may vary depending on the calendar). Students may satisfy their movement requirement through participation in interscholastic sports teams, after school physical education classes (ASPE), dance courses or movement practicums (sport, physical activity and dance).

In addition, all students must successfully pass a swimming proficiency test.

INTERSCHOLASTIC ATHLETICS

Athletics are an integral part of the experience at Emma. Students interested in a competitive athletic experience are encouraged to try out for any of the school's teams. The school fields competitive teams throughout the academic year as follows:

FALL

- V/Novice Crew
- V Cross-Country
- V Golf
- V/JV Field Hockey
- V Swimming & Diving
- V Tennis
- V/JVVolleyball

WINTER

- V/JV Basketball
- V Crew
- V Indoor Track & Field
- V Ski Racing

SPRING

- V Badminton
- V/Novice Crew
- V/JV Lacrosse
- V Softball
- V Outdoor Track & Field

V = Varsity
JV = Junior Varsity

Practices are held every day, Monday through Friday, from 4:00–5:30 p.m. Teams compete with private and public schools, generally on weekdays, but some sports may include weekend competition. Students wishing to know more about this program should speak with the athletic director.

AFTER SCHOOL PHYSICAL EDUCATION (ASPE)

Emma offers a broad curriculum of physical education classes via three sessions throughout the school year that align with our interscholastic sports: fall, winter, and spring. Sample options include: fitness walking, outdoor education, lifeguarding (age prerequisite) pickleball, skiing, swimming, table tennis, tennis, yoga and zumba. Classes generally meet Mondays, Tuesdays and Thursdays from 4:00–5:00 p.m while some classes meet two times per week from 4:00–5:30 p.m. Sign-ups are released by the athletic director after the start of the school year.

DANCE

The Athletics Department grants movement credit to students enrolled in the school's dance program. Any dance course taken for movement credit must meet at least twice a week.

MOVEMENT PRACTICUM

Students who participate in any physical activity at an advanced level and/or an activity that is not available at Emma Willard may be eligible to receive movement credit. The athletic director and director of practicum will determine if the activity meets the necessary requirements.

Please note the following:

- A written proposal from the student is required, it can be part of the Practicum Application Form available on MyEmma..
- Only students demonstrating a significant commitment or advanced ability will be considered.
- Proposals must be submitted no later than the beginning of each sport season (Fall, Winter and Spring). Specific deadlines will be announced.

SWIMMING PROFICIENCY REQUIREMENT

All Emma students are required to complete this requirement as we believe that swimming is an essential life skill that every Emma graduate should be able to demonstrate. Testing takes place at the beginning of the school year and at other times in collaboration with student and athletic department schedules. All students attempt a swimming and water safety test. Students must be comfortable in deep water to attempt this test. If a student is unable to pass the test, this student will be encouraged to sign-up for weekly swim lessons or join a swim class until the student passes the test. Students remain in swimming education until they pass the swimming and water safety test.

Chinua Achebe
Madeleine Thien
The Guardian (UK)
The New York Times
Tsitsi

ENGLISH DEPARTMENT

The mastery of English forms the heart of a strong college-preparatory program and of a liberal arts curriculum.

The English Department challenges Emma Willard students to read and analyze works of literature ranging from Sophocles' *Antigone* to F. Scott Fitzgerald's *The Great Gatsby*. Books from the traditional canon of Western civilization are juxtaposed with works representing the experience of other cultures. In addition to extensive work in vocabulary, grammar, and expository writing, students learn to craft personal and creative pieces. The English department provides the groundwork for university study in writing and literature and develops students' skills as language artists.

E-100 English I
Year 1 unit
Students in English I study a variety of texts, some hundreds of years old and some published just a few short years ago, that raise timeless questions facing people living in communities—questions about humanity and what it means to be human. While grappling with these questions, we begin to understand the way stories create empathy and help us understand ourselves, our communities, and our place in the world. English I is an introduction to the art of literary analysis and the development of an authentic writing voice; we practice both the slow, close reading of short passages and rich figurative language and the larger-scale study of textual structures and patterns. We read novels, short fiction, drama, and poetry as we study how words create and convey meaning. Students write short essays, working to articulate strong thesis statements and to support them with detailed analysis of textual evidence. Our study of grammar and vocabulary helps students craft their own clear and expressive writing in these essays, as well as in their own poetry and personal narrative. This course includes summer reading that is outlined on the school's website.

Restricted to: 9 (10)

E-200 English II
Year 1 unit
The English II curriculum invites students to explore the impact of storytelling through a series of interrelated questions: Why do we tell stories? Why do writers tell stories in the form they choose to tell them? What modes, techniques, and tools enable writers to craft narratives and convey meaning? What choices do we make to communicate who we are to ourselves and other people? By engaging with a variety of literary texts, students reflect upon these questions and hone their critical reading skills. Through a combination of projects, class discussion, and multi-genre writing tasks, students in this course will have opportunities to think, speak, and write with increasing precision, boldness, and originality. Our study of grammar and vocabulary complements these writing goals. This course includes summer reading that is outlined on the school's website.

Restricted to: 10 (11)

E-298 Creative Writing for Sophomores and Juniors
Fall and Spring .25 unit
This course is for the self-directed sophomore or junior who enjoys writing fiction and other genres and wants to strengthen those creative writing skills. In a once-a-week meeting, students share their work and receive feedback from their instructor and classmates. Students write approximately two pages a week and have the opportunity to revise their work based on feedback provided by the class. This course must be taken in addition to a student's regular English class and may be repeated for credit. Graded as Credit/No Credit

Restricted to: 10/11; 9 and 12 if room allows.

E-207 Sides Visiting Writer
Spring 0.25 credit
TBD

Open to: 9-12

E-300 English III
Year 1 unit
"What is the job of the artist/writer? What are the relationships between the identities we inherit as well as the identities we create? What role does language play in racial identity and American cultural ideals? What makes a text 'American?'"

Students in English III discover how literature and other forms of intentional expression explore the essential questions above and more. This course blends classic and less well-known texts to help students broaden and deepen their knowledge of literature classified as "American." Through a combination of projects, class discussion, and formal as well as informal writing, students in this course develop their critical thinking skills by striving to articulate complex, substantive arguments in clear, eloquent prose. Analytical and creative work become increasingly independent as the course goes on. Grammar instruction includes Khan Academy SAT preparation. This course includes summer reading that is outlined on the school's website.

Restricted to: 11 (12)

E-310 Writing Support

Students are placed in this course in order to improve their writing ability through concentration on writing processes: prewriting, writing, and revision. The course's main objective is to create a personalized strategy to meet each writer's specific needs. Members of Writing Support will work individually and in small groups, overseen by the specialist, to receive customized feedback that identifies problem areas; the teacher will also provide instructions/support on how to rectify these areas. Within this group, students will be encouraged to reach out whenever they need additional writing support outside the classroom. Other concerns of the writer, particularly audience, diction, and correctness, will also be addressed. Students usually take WS for a semester or a year; the appropriate duration for each student is determined by the instructor.

E-402 Nonfiction Workshop

Fall .5 unit

Anyone who has shared or listened to a personal essay in English I, II, or III knows that first-person narratives forge a unique connection between writer and audience. By sharing the story of our own experiences, we invite others to join us, and the resulting community is richer as a result of that learning. Students in this writing workshop practice how to craft, revise, share, and appreciate nonfiction narrative by examining the work of a variety of essayists and by learning from each other as they develop their own voices. This course includes summer reading, outlined on the school's website.

Restricted to: 11/12

E-407 Short Fiction Workshop

Spring .5 unit

Tim O'Brien, best known for his collection *The Things They Carried*, has described fiction as "getting at the truth when the truth isn't sufficient for the truth." No matter how fantastical the story or setting, we are often drawn to characters who reveal something significant about the human experience. In E-407, student writers will gain an appreciation of the craft of short story writing by studying a variety of stories and writing their own. Writers will study craft elements such as character development, point of view, voice, image, and setting to use in their own work and, ultimately, share their "truths" with an eager audience. Through including the writing workshop as part of the revision process, writers may see how the story form, like other art forms, can be crafted, shaped, and refined. Readings may include stories from writers such as Karen Russell, Rion Almicar Scott, Elizabeth McCracken, Aimee Bender, Kelly Link, George Saunders, Ted Chiang, Dionne Irving, Sayaka Murata, Manuel Gonzalez, and Percival Everett.

Restricted to: 11/12

E-411: Literature and Fairy Tales

Spring .5 unit

More than innocuous bedtime stories, fairy tales have long promoted a set of prescribed gender roles, often directed explicitly at a female audience. Classical fairy tales hold up marriage as the pinnacle of a woman's life, instruct young women in appropriate sexual behavior, punish female curiosity, and endorse the nuclear family. Because these tales still loom large, they continue to participate in the construction of modern gender roles. In this course, students will explore a number of classical fairy tales from their surprisingly dark and violent early versions to their saccharine Disney renderings to contemporary queer and feminist re-visions, considering at each turn how fairy tales reflect and inform our ideas about gender. Authors studied may include Charles Perrault, the Brothers Grimm, Angela Carter, Aimee Bender, Anne Sexton, and Emma Donoghue. Disclaimer: This course contains mature content not suitable for all students.

Restricted to: 11/12

E-418: Ecolit: Literature of the Environment

Spring .5 unit

"I believe in the forest, and in the meadow, and in the night in which the corn grows" ("Walking," Henry David Thoreau, 1851). What shapes our conceptions of natural spaces? How do those natural spaces shape us? Through a survey of literary theory, essays, and short fiction, students will investigate the changing relationships between people and nature, as well as the capability of stories to define and redefine those relationships. Texts will expose students to definitions of naturalism, conservationism, wildness and wilderness, as well as varying understandings of landscape and ecologies. Throughout this course, students will partake in a combination of discussion, critical and reflective writing, as well as experiential learning. Authors studied will include Robin Wall Kimmerer, bestselling author of Braiding Sweetgrass, among others.

Restricted to: 11/12

E-420 Dystopian Fiction

Fall .5 unit

This course will focus on the genre of Speculative fiction, which includes Dystopian fiction as a sub-genre. These are texts that ask: "what if?" and invite readers to imagine worlds in which familiar problems and tendencies are magnified, unpacked, and amplified.

Through a combination of collaborative projects, class discussion, and multi-genre writing tasks, students in this course will have many opportunities to think, speak, and write with increasing precision, boldness, and originality. Students will be encouraged to consider how the seminal works included in this course speak to our present moment, and thus, will be asked to engage with the issues of the day in a critical, open-minded, and intellectually rigorous manner. Selected texts may include The Parable of the Sower, Fahrenheit 451, Station 11, The Handmaid's Tale, and the award-winning film Her.

Restricted to: 11/12

E-421 Literature of the Good Life

Spring .5 unit

This interdisciplinary course asks students to read literature through an ethics lens. To this end, students in this course will explore a series of interrelated questions: What does it mean to live a good, meaningful life? How conscious am I of the moral choices I make each day? What does it take to achieve self-actualization and fulfillment within any given social context? Within our various worlds and communities, what do we owe to each other? Students will read philosophy to inform their responses to these questions and explore complex ethical dilemmas as a community. Core texts may include the Netflix series The Good Place; Jean Paul Sartre's play No Exit; Kazuo Ishiguro's novel The Remains of the Day, and other selections.

Restricted to: 11/12

E-422 Magic(al) Realism

Fall .5 credit

As the world reeled from the nightmare of World War I, German art critic Franz Roh and Italian novelist Massimo Bontempelli both began describing a new movement within art and literature they were seeing in their respective countries; as Bontempelli put it, "precisione realistica e atmosfera magica" — realistic precision and magical atmosphere. This came to be known, more simply, as "magical realism," a genre which juxtaposes the realistic and the marvelous, fantastical, or magical. As a class, we will read short works or excerpts from Franz Kafka, Alejo Carpentier, Gabriel García Márquez, and Leonora Carrington, among others. We will also watch whole films or excerpts by Guillermo del Toro, Frank Capra, and Daniel Scheinert. All of this work will be done in an attempt to situate and contextualize the genre of magical realism, a movement that is often considered synonymous with and exclusive to Latin American art, despite its international presence. You should expect nightly readings, two major essays, and some shorter written responses. You will also have the opportunity to write creatively in the style of any of the authors we read as a class.

Restricted to: 11/12

E-423 Comedy and Satire

Fall .5 credit

From stand-up to sketches, literature to film – comedy, by definition, gets laughs. But what is it that makes us laugh? How do we know when it's okay to laugh? And how does what makes us laugh show us what we value? Through an interdisciplinary approach, students will learn devices that create humor, the different styles comedy may take, and examine its uses as a tool for critique. Students will interrogate genre, satire, as well as the value of comedy. Students will be asked to take intellectual risks through creative projects and collaboration, and most importantly, students

will be asked to (hopefully) laugh. Texts will range in medium (print, digital, etc.) and time-period, from 19th and 20th century to contemporary. As Ronny Chieng, comic, actor, and writer on The Daily Show said, "I felt like [comedy] was something I could do...and I couldn't get a job in law. So I just kept doing comedy."

Restricted to: 11/12

E-503 Advanced Studies Postcolonial Perspectives: Literature & Theory

Year 1 unit

"What colonialism does is cause an identity crisis about one's own culture," asserts Mexican-Kenyan actress Lupita Nyong'o. In response, the field of Postcolonialism contends with the complex and ever-evolving legacy of European colonialism through the perspectives of writers, artists, and theorists from formerly (and currently) colonized countries and territories. This Advanced Studies course will serve as an introduction to postcolonial literature and theory. Through studying a variety of literary works and scholarly texts from Africa, Asia, and the Americas, we will examine the fraught relationship between culture and imperialism, considering questions such as: What is the role of postcolonial literature, film, and art in shaping collective understanding of the aftermath of colonialism? How does colonialism continue to condition individual and collective identities? What are the political implications of postcolonial texts? How do postcolonial texts call into question and resist dominant narratives of knowledge and history? How do postcolonial texts interrupt the Western canon? How does postcolonial studies intersect with gender theory, critical race theory, and Marxism? Through examining fictional and theoretical texts, conducting research, and writing analytically, this course will help you develop the knowledge and the skills necessary to enter scholarly discourse that explores these questions. This course includes summer reading, outlined on the school's website.

Restricted to: 11/12

E-504 Advanced Studies The Politics of Emotion

Year 1 unit

As Sara Ahmed writes, "Emotion is not what comes from the individual body, but is what holds or binds the social body together." Feminist and queer scholars like Ahmed have argued that emotions matter because they shape our approach to ourselves, to others, and to the world. In other words, emotions are personal and political. In directing our investment in the things around us, emotions also presumably move us to act; they govern our actions and motivate our behavior. This Advanced Studies course will examine the connection between emotion and social action through the "protest novel," a literary form that dramatizes a social problem with the goal of enacting material change. Through literary and scholarly texts, we will consider the role that literature can play in not only reflecting society but altering it. We will grapple with such questions as: What does it mean to feel in a particular way? How and why do we feel certain emotions towards certain things? What is the relationship between feeling and knowledge? How are emotions historically situated and embodied? How are they refracted through social relations such as race, class, sex, and gender? And, how do emotions mediate the personal and the political? Through examining fictional and theoretical texts, conducting research, and writing analytically, this course will help you develop the knowledge and the skills necessary to enter scholarly discourse that explores these questions. This course includes summer reading, outlined on the school's website.

Restricted to: 11/12

EXPERIENTIAL LEARNING DEPARTMENT

Experiential learning (EL) is a philosophy about lifelong education. The core tenant of EL is that people learn best when they experience, reflect, think, and act in a spiral process. EL educators employ flexible roles during this learning process that align with the four categories listed above, including coach, facilitator, expert, and evaluator.

In addition to Emma Willard courses that include elements of EL, the EL Department is composed of four programs: career exploration, service learning and community engagement, Practicum, and Signature. Below are some of these course offerings.

JESTERMESTER

Jestermester is a once-per-year mini-term when students have the opportunity to do a dive deep into a single topic that interests them for a full week of immersive, hands-on learning.

During Jestermester, Emma teachers and students alike embrace the spirit of the Jester and bring an extra sense of play and adventure to the work of teaching and learning. Jestermester courses are designed to energize and inspire our student body, asking them to think on their feet, work together to solve problems, and step outside of their comfort zones to explore the world beyond their classroom walls.

It is expected that all faculty and students participate and fully engage in a Jestermester course; attendance is enforced in the same way that it is for regular classes. Jestermester exists because we believe that experiential, interdisciplinary, passion-fueled learning should be a core part of the Emma experience, and we want everyone to take part!

REGISTRATION AND REQUIREMENTS

The course catalog for the year's Jestermester is released each fall. Certain courses have prerequisites (such as language proficiency) which will be the first factor in determining their rosters. The prerequisites for a given course are listed at the bottom of the relevant course description in the Jestermester Catalog. Most Jestermester courses do not have prerequisites.

All else being equal, seniority is considered when making course assignments; as 12th graders only have one year remaining to participate in Jestermester, we want as many of them to get their top choices as possible! However, Jestermester is an opportunity for students to get to know students in other grades, so that priority is also vactored in.

While we hope to be able to assign every student to one of their top choices, it is possible that some students will be assigned to courses outside of their top ten. The interest form asks students to select two courses that they do not want to be assigned to and provide a brief explanation. The form also asks students to explain if they have any physical, cultural, or other restrictions that might impact their course placement.

FEES AND FINANCIAL AID

We do not consider financial need when assigning Jestermester courses. All students can enroll in the courses that interest them most, regardless of financial need. Students enrolled in Jestermester courses that involve overnight travel will be charged a fee to help defray the higher costs of those trips. All travel, activity, lodging, and food costs are included in the fee. Fees for the most recent round of Jestermesters ranged from $0 to $5,500.

Financial assistance is automatically awarded based on the amount of aid that the participating students receive on their tuition. In other words, students who receive significant financial aid for tuition will also receive significant financial aid if they are enrolled in these courses.

PRACTICUM

Practicum, Emma Willard's independent study program, offers students opportunities to enrich and extend their studies through academic and nonacademic experiences available on and off campus. Students individualize part of their weekly schedule through learning that is experiential and self-directed. Experiences fall under the following categories: arts, career exploration, college courses, community engagement and service learning, independent study, language study, sports and music. If applicable, the student or family pays instructor fees directly to the instructor.

Practicum opportunities are pursued in several ways: most common are part-time classes, volunteer work experiences, or other activities pursued on campus, in the Capital Region or in a student's home region. Some students pursue practicum projects full-time for a short period of time.

Each practicum experience is an integral part of a student's schedule, planned with guidance from the Director of Practicum, the student's Academic Advisor and College Counselor (if applicable). The Director of Practicum may also consult with the appropriate department chair. Qualified projects may earn academic credit but will not be used to satisfy departmental graduation requirements; please see the director of Practicum with questions or to apply.

Credit by application.

Practicum Sampling:

- Finance & Entrepreneurship
- Empire State Youth Orchestra
- Law
- Culinary arts
- Horseback riding
- Language study
- Assisting a first-grade teacher
- Figure skating
- Fencing
- College courses
- Tae Kwon Do, Hapkido
- Architecture
- History research
- Career exploration
- Helping children with special needs
- Hospital volunteer
- Afterschool children's program volunteer
- NYS Legislature

A part-time practicum (one to eight hours weekly) is arranged around free periods during the day, the evening, or on the weekend. A full-time practicum involves a concentrated period of time from one to three weeks in length and may require using vacation time and some released time from classes. A student is responsible for all assignments and classroom work missed while away. All practicum experiences are listed on student transcripts as Practicum: Independent Study, students work with their College Counselor to tell a compelling story about their experience as part of their time at Emma.

Students seeking academic credit must submit a proposal to the Director of Practicum by May 1 for Fall proposals and by December 1 for Spring. Late requests are seldom accepted. Requests must be resubmitted for each semester or year. Parental permission is required. All financial obligations to the school continue while the student is off-campus, and all expenses while away are the responsibility of the family. See the Director of Practicum for application guidance.

In general, the following guidelines are used to determine whether practicum credit will be given:

- The student has exhausted all on-campus opportunities to pursue a specific, demonstrated interest. An exception is made for day students who have been pursuing voice, musical instrument instruction, or dance before enrolling at Emma Willard School. These students may continue with that teacher and receive practicum credit.
- The school does not offer a course that would allow a student to pursue advanced-level work in a specific area of demonstrated excellence.

- The student is not using this practicum to fulfill Emma Willard School graduation requirements in any department except for movement credit, which is granted by the athletic director and the practicum director for students pursuing competition-level or advanced sports training to fulfill a physical education requirement. Exceptions do not guarantee that the school will provide transportation.
- Students who pursue internships, other programs, or college courses that do not fit the criteria stated above, and who have not been granted an exception, will not receive academic credit nor will school transportation be provided. While under school jurisdiction, students must have parental permission and school permission to leave campus to participate in any internship, college course, or other program not granted academic credit by the school.

APPEALS PROCESS

Any student requesting exceptions to these guidelines must do so in writing to their advisor, the Director of Practicum, and the Chair of the Experiential Learning Department, who may consult with other department chairs as appropriate.. This group will arrive at a joint decision.

TRANSPORTATION

The practicum program provides subsidized transportation to students to local practicum sites. For one-off or short term opportunities, student accounts are billed a fee at regular intervals based on the distance from EWS. Transportation to regularly occurring opportunities may be billed quarterly to a student's tuition statement. While every effort is made to accommodate students wishing to pursue local practicums, numbers may be limited because of scheduling considerations and cost. Students may be responsible for organizing their own transportation in some cases.

STEAM

EL-255 STEAM Research 9th Grade

Spring 0.5 credit
STEAM 9 Research is for ninth graders who are interested in a STEAM field (science, technology, engineering, arts, math). Students begin by exploring several hands-on projects with select faculty. During the second half, students explore one of these projects in a small group, and make a poster for the school community. Students maintain a digital portfolio to document their work. Enrollment is by application and requires advisor approval.

Grading system: Credit/No Credit
Restricted to: 9

EL-256 STEAM Research 10th Grade

Year 0.5 credit
STEAM 10 Research is for tenth graders who have demonstrated interest in a STEAM field (science, technology, engineering, arts, math). Students begin by identifying their STEAM interests, and then develop their ideas into a personalized project done in small teams. Students work on their projects for the entire academic year and make a poster for the school community. Students maintain a digital portfolio to document their work.

Grading system: Credit/No Credit
Restricted to: 10

SIGNATURE

EL-400 Signature

Year 1 credit
Signature allows students to complete year-long capstone projects during their junior and/or senior year(s). This opportunity is for students who have an inherent connection to a topic and have sufficient time in their schedules, including fifty minutes per week as homework, to enroll in this course. Some students may additionally work with experts off campus to create their Signature. This course is designed to support students through each phase of their

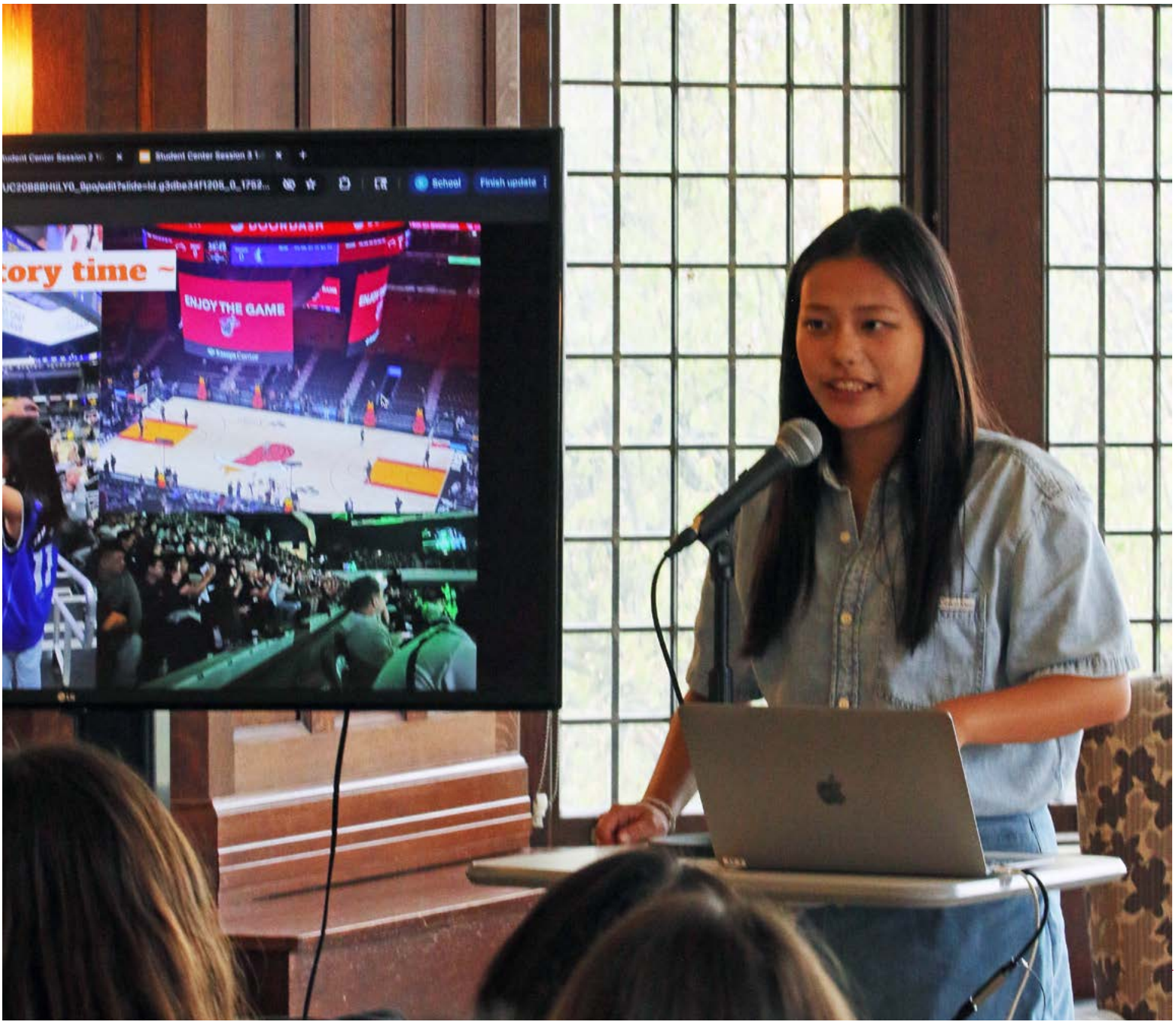
project, through assignments and dedicated individual time.

In class, students learn about general topics, work with their manager on specific goals, participate in special classes (ex. invited guests), and work on their projects individually. Students create and develop a digital portfolio for Signature, in which they add regular posts, and also complete course assignments. Final presentations, featuring the experience as well as the outcomes, are shared with the school community in the Spring Showcase.

Students working off campus may utilize the school's transportation service for a subsidized fee. Students requiring financial support for any reason should contact a program manager.

Managers are available to discuss ideas and offer advice for possible Signature projects and suggest people as resources for projects. This interaction is strongly encouraged. Students must apply and be accepted into the program for final enrollment. The Signature enrollment process is slightly different from normal course registration. Students may add Signature to their schedule to indicate interest, as they do for all courses, and they can expect future application steps to finalize acceptance into the program. The application can be found here.

Grading: Credit/No Credit
Restricted to: 11/12



YOUR TURN
Old Navy

HISTORY AND SOCIAL SCIENCE DEPARTMENT

The History and Social Science Department offers courses in history, art studies, and social sciences. These courses teach close reading, analytical writing, analysis, and synthesis. They stress observation and interpretation of primary sources; critical engagement with scholarship; research and writing; and seminar discussion of ideas.

HISTORY REQUIREMENTS

Ninth graders are required to take Classical Mediterranean History (H-110) in the fall semester and a ninth-grade world history elective (African History, East Asian History, or Indian History) in the spring semester. Tenth graders are required to take a tenth-grade world history elective (European History, Latin American History, or Middle Eastern History) in the fall semester and Contemporary World History (H-210) in the spring semester. Each of the regional electives studies a culture's history and contact with the surrounding world, examining change over time and contemporary world history from social, political, economic, and cultural perspectives. Eleventh graders will be required to take United States History or Advanced Studies United States History. All the ninth-, tenth-, and eleventh-grade courses are designed to offer students a progression of reading, writing, research, and critical analysis skills.

COURSES IN THE REQUIRED 9TH-, 10TH-, AND 11-TH GRADE SEQUENCE

9TH-GRADE REQUIRED HISTORY COURSE

H-110 Classical Mediterranean History
Fall 0.5 credit
This course examines the historical development of the classical Mediterranean world, from its origins in the early civilizations of the Aegean Sea to the decline of the Roman Empire. Significant attention is paid to the social, political, economic and cultural characteristics of classical Greece and Rome. Students also examine the geography of the region and its role in shaping history. In addition to the content mentioned above, students learn to read and analyze primary and secondary sources, develop analytical writing skills, participate actively and effectively in class discussions, practice research and citation skills, and learn how historians think.

Restricted to: 9(10)

9TH-GRADE WORLD HISTORY ELECTIVES (one per student is required)

H-111 African History
Spring 0.5 credit
This course explores major cultural, social, economic, and political developments in Africa from the early Iron Age kingdoms through the early twenty-first century. After a study of the major East and West African kingdoms, students explore topics including African adaptations of Islam and Christianity, the African response to the Atlantic slave trade and European imperialism, Africa during the world wars, the struggle against apartheid, and the legacy of colonialism. Throughout the course, special attention is given to primary sources, African voices, and the interactions of environment, climate, geography, and historical developments. Assignments include readings in both secondary and primary sources as well as several longer research, writing, and cooperative learning projects.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 9(10)

H-112 East Asian History

Spring 0.5 credit

This course is designed to introduce students to the intertwined histories of China, Japan, and Korea from their early civilizations through the turn of the 20th century. Topics such as the early Yellow River civilizations, Chinese philosophy, the Silk Road, the Meiji Restoration, the Silla period in Korea, and the Korean War in 1950 are covered. Students explore the social, cultural, geographic, political, and economic history of East Asia through primary and secondary texts and research. This course also examines the interactions of East Asia with the rest of the world and the relationships of each of the East Asian countries with each other. The primary focus of the course is on China and Japan, with a secondary focus on Korea. Course requirements include regular readings and homework; independent research and historical analysis with an emphasis on writing; tests and quizzes; and cooperative learning projects.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 9(10)

H-113 Indian History: Origins of Civilization to the Early 20th Century

Spring 0.5 credit

This world history elective examines the history of India and its neighbors from the development of civilization in the Indus River valley through the origins of Hinduism and Buddhism, the spread of Islam into the region, and increasing contact with and colonization by Europeans. The course ends with the emergence of Indian nationalism and colonial resistance in the 20th century. Students explore these developments through their political, social, cultural, economic and environmental elements. Students also examine the connections between critical developments in Europe and the history of SouthEast Asia. Examples of these connections include the role of mercantilism and absolute monarchies in the establishment of trading empires in Asia and the relationship between the Industrial Revolution and the developing British colonial policy in India. Course requirements include regular readings and homework, research and analytical writing, tests and quizzes, as well as cooperative learning projects.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 9 (10)

10TH-GRADE REQUIRED HISTORY COURSE

H-210 Contemporary World History (final, or fourth, course in world history sequence)

Spring 0.5 credit

Beginning with the dawn of the 20th century and continuing through the present, this course looks at major developments in world history as seen in political, social, economic, and cultural affairs. Special attention is given to the causes and effects of the two world wars, the re-shaping of the world following World War II, emerging alignments and tensions following the end of the Cold War, and the range of interactions between regions in times of both peace and conflict. This course is the capstone of the world history sequence, and students prepare a major project demonstrating their mastery of the skills necessary to analyze a particular historical problem and communicate their conclusions effectively.

Restricted to: 10(11)

10TH-GRADE WORLD HISTORY ELECTIVES (one per student is required):

H-211 History of the Middle East

Fall 0.5 credit

This world history elective examines the history of Mediterranean Asia beginning with the geography and culture of pre-Islamic Arabia and ending with the establishment of modern Mediterranean Asia after WWII. Students explore the region through its political, social, cultural, economic and environmental aspects. Special attention is given to the origins, beliefs and practices of Islam, the development and spread of the Islamic empire, and moments of exchange and interaction with Europe, including the Crusades, WWI, and the development of the Modern Middle East. Course requirements include regular readings and homework, research and analytical writing, tests and quizzes as well as cooperative learning projects.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 10(11)

H-212 Latin American History: From Early Civilizations to the Challenges of the 20th century

Fall 0.5 credit

This world history elective examines the course of Latin American history from the development of sedentary communities such as the Olmecs and Toltecs to the major civilizations of the Mexica, Inca, and Maya, and through conquest and colonization to the end of the 20th century. Students explore the connections between critical developments in Europe and the history of the Latin American region. Examples of these connections include the relationship among the Renaissance, the voyages of exploration and the conquest of the Americas, as well as later forms of imperialism. Twentieth-century topics will also be addressed, including the implications of the Cold War for Latin America. Course requirements include regular readings and homework, research and historical analysis, and tests and quizzes, as well as cooperative learning projects.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 10(11)

H-213 European History

Fall 0.5 credit

This course surveys developments in European history from the Middle Ages through the unification of Italy and Germany and early imperialism. Students examine major social, political, and economic changes in Western Europe, beginning with the Renaissance and moving through the Reformation; Scientific Revolution and Enlightenment; French and Industrial Revolutions; and rise of conservatism, liberalism, nationalism, and imperialism. Course requirements include regular readings and homework, research and historical analysis, and tests and quizzes, as well as a cooperative learning project.

Prerequisite: Classical Mediterranean History (H-110)
Restricted to: 10(11)

11TH-GRADE US HISTORY COURSES (one year of US History is required):

H-331 United States History

Year 1 credit

This course provides an introduction to United States history. Although the course will not provide a comprehensive survey of American history from the period of early contact through the present day, it will explore the most significant and recurrent themes of American history, paying particular attention to the evolving and highly contested notions of liberty, democracy, citizenship, and equality. After a brief survey of early foundational documents, the class will begin its in-depth exploration of the American past by examining the Civil War and Reconstruction era. The year's study will then extend through the late nineteenth and twentieth centuries, providing a rich context through which to think critically about our own early twenty-first century historical moment. While analyzing the nature of the American experience, we ask such questions as: What roles have race, gender, and class played in the lives and perceptions of the American people? How have factors such as economics, ideology, law, and religious faith interacted in shaping the country's history? Students spend significant time reading secondary and primary documents closely and critically, cultivating the ability to express ideas clearly and with sufficient factual evidence to be persuasive. At least one major research project allows students to explore the process of scholarship by studying a topic in depth.

Prerequisite: H-210 Contemporary World History
Restricted to: 11(12)

H-333 Advanced Studies United States History

Year 1.5 credits

This course offers an intensive introduction to the history of the United States. Although the course will not provide a comprehensive survey of American history from the period of early contact through the present day, it will explore the most significant and recurrent themes of American history, paying particular attention to the evolving and highly contested notions of liberty, democracy, citizenship, and equality. By the end of this course, students should not have gained not only a greater appreciation for the complexity and richness of our shared past, but also a keener understanding of the ways in which our shared American history continues to shape and influence the society and culture that we live in today. Students who complete this course will also be able to demonstrate the different modes of critical thinking, analysis, and presentation that are at the heart of the historical discipline. Specifically, the course will offer an initiation into the standards of historical study, including factual recall, document/artifact analysis, reasoned argumentation, clear communication (written and oral), and historiographic contextualization.

The course requires students to handle significant amounts of nightly reading, to analyze and synthesize primary source documents, and to write organized, well-developed, and well-supported historical essays of various lengths. At least one research paper/project is required in this class. Admission to this class is contingent upon departmental and advisor approval, with continued enrollment dependent on consistent effort and performance. As with other Advanced Studies courses, additional assignments should be expected over school vacations. There is a summer reading requirement that includes a written essay (due on the first day of class). While this course aligns with parts of the Advanced Placement curriculum, it does not prepare students fully for the AP exam.

Prerequisite: H-210 Contemporary World History
Restricted to: 11(12)

HISTORY AND SOCIAL SCIENCE ELECTIVES

H-320 Indigenous History of North America

Spring 0.5 credit
This course provides a general overview of American Indian history, art, literature, tribal law, government, and sovereignty. The course will focus on both the historical, as well as contemporary impact that Indigenous Peoples still have on the history and cultural development of the North American continent. This course offers an introduction to a variety of historical turning points remembered amongst Indigenous Peoples and settler-colonists from the seventeenth century through the twenty-first. Special attention will be paid to local history, including that of the Stockbridge Munsee Band of Mohican Indians. Students are expected to come to class prepared for discussion and collaboration, and they will be evaluated primarily on writing assignments and student-led projects.

Restricted to: 11/12

H-322 Global LGBTQ History

Spring 0.5 credit
This course explores the social construction of gender and sexuality as well as experiences of various LGBTQIA communities around the world in specific historical time periods. In this course we will approach "queerness" broadly as questioning, ignoring, resisting, or in other ways not conforming with the dominant norms of gender, sex, sexuality, and/or erotics in a society. As we create a class community, we will establish a shared framework, discuss terminology, and read several works of queer theory together. We will then move into an analysis of several case studies that allow us to learn more about how the construction of gender and sexuality has varied over time in different cultural situations. While we will acknowledge and confront moments of repression, we will also make space to celebrate queer culture and the contributions of queer individuals. Students will be expected to participate actively in discussions, complete several writing assignments, conduct research individually and collaboratively, and present their findings in essays, presentations, podcasts, or other media.

Restricted to: 11/12

H-325 Advanced Studies Art History

Year 1.5 credits
This course provides an introductory survey of the history of art from early civilizations to the modern era. The course focuses primarily on art from the Western tradition, though students will also explore artistic traditions from around the globe, including Asia, the Americas, and the Islamic world. Students examine the formal/stylistic aspects of art as well as the cultural context in which that art was produced. Students become familiar with the principles of design, the processes of artistic production, and the fundamental elements of style in painting, sculpture, architecture, and other contemporary media. Understanding the formal elements of art allows students to explore the cultural issues surrounding artistic production, such as function, patronage, gender, ethnicity, politics, and religion. Ultimately, this course provides students with the visual literacy they need to understand their world fully. As with other advanced studies courses, additional assignments should be expected over school vacations. There is a summer reading requirement that includes a written essay (due on the first day of class). While this course aligns with parts of the Advanced Placement™ curriculum, it does not prepare students for the AP exam.

For students enrolled in Advanced Studies Art History, the course satisfies .5 credits of the arts graduation requirement, though it does NOT meet the distribution requirements for visual or performing arts. For example, an incoming 9th grader would still have to take one course in visual arts and one course in performing arts, but Advanced Studies Art

War on the
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History would count as 0.5 credits toward the 2.0 total credits in art they need to graduate.

Prerequisites: H-210 Contemporary World History.
Restricted to: 12 (11)

H-326 United States Government and Politics

Year 1 credits
United States Government and Politics is a yearlong course that introduces students to the political history, institutions, and workings of American government. Students begin by exploring the foundations of American democracy, including pivotal works in American political thought, the debate surrounding the U.S. Constitution, and the Bill of Rights. Students then study key aspects of American government, including federalism, the separation of powers, the three branches of government, civil liberties, and civil rights. Students will explore how and why politics and public policy making continue to evolve in the United States, particularly with respect to economic, social, and foreign policy. Students will analyze both the role and impact of the Supreme Court, political parties, elections, public opinion, the media, interest groups, and political polarization in American democracy. Throughout the year, students will engage with current political issues and events, draw connections to the foundational concepts and themes in American politics, and understand the impact of these issues on the United States and the world.

Prerequisite: U.S. History (H-331) or AS U.S. History (H-333), or concurrently enrolled in H-331 or H-333
Restricted to: 11/12

H-328 Diplomacy and Peace Studies

Year 1.0 credit
This course introduces students to key elements of diplomacy, conflict resolution, and peace building through a variety of historical case studies from around the world. Students will analyze the historical, political, economic, and social elements of each case study, while evaluating the impact of power dynamics, social structures, and group dynamics. Additionally, students will examine the causes, expressions, and consequences of international conflicts and consider mechanisms of their prevention, management and resolution. Students will also learn how nonviolent action methods bring about social and political change, and they will explore the theory and philosophy underlying strategies of nonviolent action. Students will also hone their own conflict resolution skills by studying conflict management theory and peacebuilding practice such as conflict styles, active listening, assertion, collaborative problem solving, principled negotiation, mediation, and nonviolent conflict intervention. Students will be expected to participate actively in class discussions, conduct research both individually and collaboratively, complete several writing assignments, and demonstrate their learning in project-based work.

Restricted to: 11/12

H-329 Women's History and Gender Studies

Fall 0.5 credit
This semester-long course explores women's history and the field of gender studies through an intersectional, global lens. Students will engage in collaborative projects and assignments throughout the semester to explore gender theory as well as move through a variety of case studies about women's history. We will trace the creation of patriarchy and its use as a tool of structural power across time. Global feminism and intersectionality will be key lenses in this class with which we will analyze both past and present women's rights. As such, this class will also span pre-colonial and non-Western understandings of gender. Students will be expected to participate actively in discussions, complete several writing assignments, and conduct research individually and collaboratively.

Restricted to: 11/12

H-345 Advanced Studies in Economics

Year 1.5 credits
This advanced course offers a comprehensive introduction to the core principles of economics. In the fall semester, students will study microeconomics, focusing on individual decision-making, market structures, supply and demand, and the role of government in the economy. In the spring semester, the focus shifts to macroeconomics, exploring topics such as economic growth, inflation, unemployment, fiscal and monetary policy, and international trade. Each semester culminates in a term paper where students apply economic reasoning to real-world issues, and students will regularly engage in class presentations to develop their communication and analytical skills. This course is ideal for students interested in business, public policy, or the social sciences and serves as a strong foundation for college-level economics.

Prerequisites: U.S. History (H-331) or AS U.S. History (H-333), or concurrently enrolled in H-331 or H-333; successful completion of Algebra II and Trigonometry (M-325 or M-326)
Restricted to: 12

H-364 Advanced Studies Comparative Government and Politics

Year 1.5 credit

Advanced Studies Comparative Government and Politics focuses on the world's diverse political systems, including their political history, institutions, and the impact of various political, economic, and social factors. This course begins with an introductory unit on the foundational concepts and theories in comparative government, and then proceeds to a country-by-country approach that addresses the similarities and differences among modern political systems, including developed democracies, developing democracies, and authoritarian regimes. Case studies will include countries around the world, such as the United Kingdom, India, Mexico, Brazil, South Africa, Nigeria, Russia, China, and Iran. Through this course, students will increase their understanding of the institutions, processes, and issues within each country's political system, and how they compare to other countries' political systems. Students will also engage frequently with current events, and will be able to analyze contemporary political issues, draw connections to the course material, and understand their impact on the world. This course has a substantial summer reading requirement that includes a written essay (due on the first day of class).

Prerequisites: H-210 Contemporary World History
Restricted to: 12 (11)

H-388 Modern African American History

Fall 0.5 credit

This semester-long course will take as its organizational principle the basic assumption that African Americans have played a definitive role in the life of the United States. The course will begin with a brief overview of the African American experience before the 1910s and then move on to the primary focus of the course, which is the twentieth and twenty-first centuries. Prominent themes may include the Great Migration; northern urbanization; the development and legacy of the modern Civil Rights Movement; Black feminism and intersectionality in the 1970s and 1980s; environmental justice; and current issues, including the "New Jim Crow," Black Lives Matter, and questions of reparations. Over the semester, we will engage with primary and secondary sources by such figures as Isabel Wilkerson, W.E.B. Du Bois, Marcus Garvey, Langston Hughes, Martin Luther King Jr., Malcolm X, James Baldwin, Audre Lorde, the Combahee River Collective, Michelle Alexander, Ta-Nehisi Coates, and Claudia Rankine.

Restricted to: 11/12

un millón de dolares y Podría
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con ella

LANGUAGE DEPARTMENT

To become increasingly proficient language users and learners who can identify and navigate cultural nuance: these are the goals that the Language Department sets for Emma Willard students. Whether studying Chinese, French, Spanish, or Latin, every student experiences rigorous classroom training and stimulating opportunities for actively learning an additional language. In language study,classroom practice is enhanced by films, excursions, language tables, guest speakers, and the use of online tools. School-sponsored language programs abroad provide students with the unparalleled experience of living the language as they are learning it.

WHICH LANGUAGE SHOULD YOU CHOOSE?

Chinese
China is one of the world's oldest and richest continuous cultures. Spoken by over one-fifth of the world's population and recognized as the third most spoken language in the U.S, Mandarin Chinese is the official language of China and several other countries and regions, including Taiwan, Singapore, and Malaysia. The enduring influence of Chinese language and culture has been inspiring East Asian and beyond. Although Chinese language differs from western languages in many ways such as pronunciation and writing system, learning the language is not as difficult as commonly assumed. At Emma, students will experience and explore authentic Chinese language and culture through a four-level curriculum, each level being equivalent to a semester of college level Chinese. With China's escalating significance on the world stage and its advancements in technology, learning the language will also be invaluable for those pursuing careers in computer science, engineering, economics, business, banking, trade, and international affairs.

French
From learning the basics of the language to communicating with people from every continent, students will explore a myriad of cultures from the Francophonie (French-speaking world). French is spoken on all five continents and plays a vital role in international diplomacy, business, and the arts. Courses at Emma Willard focus on building communication skills in reading, writing, speaking, presenting, and listening, with an emphasis on interactive and practical language use through authentic documents, conversations in class and with native guest speakers. We strive to create a dynamic and participatory classroom environment–students are expected to be active participants and are encouraged to immerse themselves fully in the language and culture.

Latin
"It took Latin to thrust me into a bona fide alliance with words in their true meaning. Learning Latin (once I was free of Caesar) fed my love for words upon words, words in continuation and modification, and the beautiful, sober accretion of a sentence," wrote Eudora Welty. Latin is intellectually rewarding. It can also help students learn other languages and improve their grammar and vocabulary in English. As they explore the fascinating language, strange-yet-familiar culture, and dazzling literature of the Romans, Latin students learn close reading, detailed grammatical analysis, etymology, rhetoric, and the foundations of many modern cultures.

Spanish
To speak Spanish is to be able to communicate with the citizens of over two dozen nations and the increasingly numerous Hispanic communities within the United States. For young people seeking careers in an ever-changing, diversifying world, it is likely that their future professional and social communities will be Spanish-speaking. Authentic materials such as video, music, art and text by Hispanic authors will provide exposure to the culture and history of Spain and Latin America. In these courses, the student will develop the ability to communicate through written text and conversation in three modes: interpretive, interpersonal, and presentational. A student of Spanish can expect an active learning environment centered on participation.

LANGUAGE PLACEMENT

New students who have begun the study of an additional language and plan to continue with that language must take a placement examination that evaluates all relevant language skills, including speaking, upon being accepted into Emma Willard School. The language department assesses the exam and places students accordingly.

Students, whether new or returning, who have taken a break of one year or more from studying a particular language and wish to resume their studies must take a placement examination.

A student who wishes to bypass a level of language study must reference the Language Department Recommendation Philosophy and Petition Process document to see if they fulfill the requirements to do so.

GRADUATION REQUIREMENTS

Domestic students, even if bilingual, are required to have a successful completion of the third (300) level of a single language following an initial placement test at Emma Willard. Please know that the most selective colleges would like to see all four years of all five core classes on a transcript.

Transfer students who did not complete level III of a language at their last institution and took a language not offered at Emma Willard will be asked to take a new language on campus until graduation.

CONTINUED LEARNING

If students have taken all the courses offered in the language of their choice at Emma, they have two options to consider to continue with their education:

LANGUAGE SIGNATURE

Students may choose to focus on an area of personal interest with the support of the Language Department on campus. Please see the requirements and standards here.

ONE SCHOOLHOUSE

Students may seek permission to enroll in online courses with this institution. In order to do so, students must have all three periods of one block free within their daily schedule. This counts as an AS course. Their grades from One Schoolhouse will appear on their Emma Willard transcript. Please see the course catalog for this institution here.

LANGUAGE EXEMPTIONS

INTERNATIONAL MULTILINGUAL STUDENTS

International students who are multilingual are not required to take a language at Emma Willard School in order to graduate. Their transcript will contain the language “This student is language exempt. Reason: This student is international and bilingual.” Adults on campus will also be able to see this exemption in the notes section of their profile on MyEmma. Once again, please remember the most selective colleges would like to see all four years of all five core classes on a transcript for all students.

Some international multilingual students that want to take an additional language may be asked to successfully complete their English Support class(es) before they are allowed to do so.

STUDENTS WITH DOCUMENTED DISABILITIES

Students with learning disabilities may be considered for a language exemption when their disability specifically impacts their ability to process language.

New entrants who have documentation of an existing language exemption from a previous school will be eligible for a language exemption at Emma Willard School. New entrants who have documented learning disabilities but who were not previously exempted will be enrolled in an additional language with appropriate accommodations, and their progress will be monitored for at least eight weeks before additional support is considered.

Existing students who are diagnosed with learning disabilities while a student at Emma Willard will be granted appropriate accommodations, and their progress will be monitored for at least eight weeks before additional support is considered.

If an exemption is determined to be the necessary course of action based on subsequent progress monitoring, the student will be permitted to drop the class without a W appearing on their transcript. This exemption will be flagged on the transcript and appear in the notes section of their student profiles. In this case the language will say, "This student is language exempt." No reason will be provided.

No student is required to be exempt, and all students are welcome to enroll in a language if they wish.

CHINESE

L-170 Chinese I

Year 1 credit

This introductory course is the first step in students' Chinese learning journey at Emma Willard and is designed for students with little to no background in the language. This course introduces Chinese pronunciation and tones and provides students with a strong foundation in the mechanics of the language with an equal emphasis on listening, speaking, reading, and writing. Students will also be introduced to topics in Chinese culture, and will be able to practice their Chinese skills in real world activities such as calling friends and exchanging postcards with students in China. By the end of the year, students will be able to comprehend paragraph level discourse and express themselves in complete, thematically connected sentences on familiar topics such as family, friends, school, food, dorms, shopping, and travel.

Open to: 9/10/11/12

L-270 Chinese II

Year 1 credit

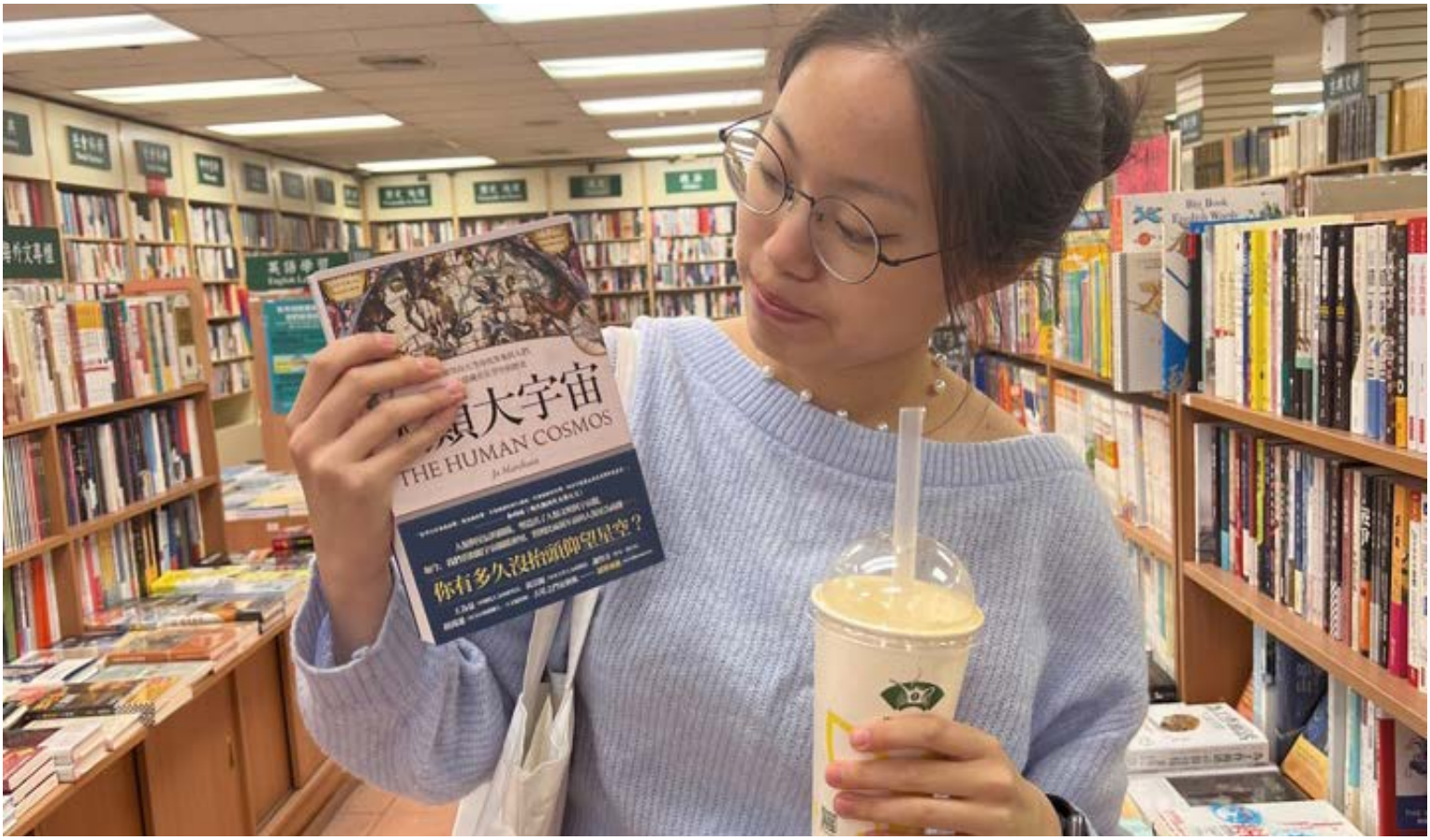
In this intermediate language course, students continue to strengthen their listening, speaking, reading, and composition skills in modern Mandarin Chinese. Through an exposure to a wide variety of topics pertaining to daily life and society, students will further develop the skills to express themselves with increasing nuance and complexity. Students will have many opportunities to practice their Chinese language skills, such as calling for food/drink delivery, asking directions, doing surveys, and sharing their life via vlog. Students will research topics in Chinese culture and present their findings to the class. By the end of the year, students will not only be able to comprehend paragraph level discourse, but also confidently carry on extended conversations and narrate stories about an increasingly diverse range of topics such as the weather, Chinese cuisine, visiting the doctor, dorm life, sports, and international travel.

Prerequisite: Chinese I (L-170) or recommendation of the department
Open to: 9/10/11/12

L-370 Chinese III

Year 1 credit

At this high-intermediate to pre-advanced Chinese language course, students hone their interpersonal, interpretive, and presentational communication skills through a variety of projects and exposure to a wide variety of authentic language materials such as songs, TV shows, commercials, and films. Students also develop their narrative, argumentative, and persuasive writing skills through the completion of regularly assigned compositions. Students will practice their new



Chinese skills in real world activities such as community service, interviews to native speakers, story writing and role performing, celebrating Chinese festivals by making traditional handcrafts and cooking traditional food, and more!

Prerequisite: Chinese II (L-270) or recommendation of the department
Open to: 9/10/11/12

L-471 Advanced Studies Chinese IV
Year 1.5 credits
This Advanced Studies Chinese language and culture course in Mandarin Chinese is equivalent to fourth semester Chinese in an intensive university language program. This course emphasizes communication by applying interpersonal, interpretive, and presentational skills to real-life situations. Students will be in close contact with the local Chinese community through projects such as interviews. The Advanced Studies Chinese language and culture course engages students in an exploration of culture in both contemporary and historical contexts including history, philosophy, poetry and more. The course develops students' awareness and appreciation of cultural products, practices, and perspectives. It also helps students develop their critical thinking and analytical skills.

Prerequisite: Chinese III (L-370) or recommendation of the department
Restricted to: 10/11/12

FRENCH

L-130 French I
Year 1 credit
This is an active class that gives the beginning student the vocabulary and grammar structures necessary to communicate on a basic level with French speakers on a variety of familiar subjects such as school, home, activities, etc. The student will learn how to formulate sentences, paragraphs, and dialogues through listening, speaking/presenting, reading and writing. Of equal importance are activities offered to acquaint students with a myriad of cultural aspects and the diversity of the francophone (French speaking) world. Pair and group work, use of audio, video, and other

authentic materials ensure that students take ownership of creating a strong foundation in the language and truly use the language to communicate, both in its oral and written forms.

Open to: 9/10/11/12

L-230 French II

Year 1 credit

In this course students review the fundamentals of French I while gradually building new vocabulary banks and learning to use more complex tenses and grammar structures. By means of written and oral practice, selected readings, audio passages, and lesson-related videos, students improve their skill in speaking, listening, reading, and writing. Cultural topics continue to be explored through occasional readings and visual aids. Students finish the course with a stronger foundation in the language and a growing confidence. They will be well immersed in the notion that thoughtful practice leads to improvement.

Prerequisite: French I (L-130) or recommendation of the department
Open to: 9/10/11/12

L-330 French III

Year 1 credit

Taught in an immersive French environment, students in French III communicate not only about their own lives, but also about the world around them. Students make cross-cultural connections and comparisons that enable them to expand their understanding of the target language. Through discussion of the material presented, whether reading articles, viewing videos or completing listening exercises, they enrich their vocabulary, gain insight into varied francophone cultures, and achieve greater ease in oral and written communication. Students recount events and experiences orally, read short authentic material for main ideas, and write about familiar topics using more complex grammatical structures. They engage in targeted and scaffolded conversations with their peers and can be understood by native speakers accustomed to dealing with foreigners. Emphasis is on consistent use of the language for classroom activities as students discuss issues of interest in the world, with a particular emphasis on the French-speaking world. Students

continue to fine-tune their listening, speaking, presenting, reading and writing skills in order to become confident and capable communicators in French.

Prerequisites: French II (L-230) or recommendation of the department
Open to: 9/10/11/12

L-431 French IV: Exploration of the Francophonie (French-speaking World) beyond French Borders

Year 1 credit
Through the study of history, geography, music, literature, the arts and other authentic materials, students will explore various facets of the Francophonie. Students will come to understand the connections that exist between French-speaking provinces, territories and countries such as Haiti, Québec, Côte d'Ivoire, to name a few, and how those connections have implications on culture, daily life, and the world at large. This course will entail listening to media from a variety of countries from the Francophonie, reading, essay writing, and discussions, all in French! It is thus required that students be comfortable and knowledgeable with the language, both in its oral and written forms.

Prerequisite: French III (L-330) or recommendation of the Language Department
Restricted to: 10/11/12

L-532 Advanced Studies French V: French Identity(ies)

Year 1.5 credits
What does it mean to be French in the 21st century? This Advanced Studies course examines French identity as a complex and evolving construct shaped by history, culture, law, language, religion, gender, race, and social class. Students explore civic, cultural, ethnic, and biological frameworks of identity, questioning how nations define belonging and who is included—or excluded—from the national narrative.

Through an interdisciplinary and inquiry-based approach, the course addresses major historical moments alongside contemporary debates on immigration, secularism (laïcité), discrimination, women's rights, and nationalism, with particular attention to post-colonial histories and the lived experiences of Muslims in France. Students are encouraged to hold multiple perspectives, engage in respectful dialogue, and analyze how systems of power shape identity.

Comparisons with the United States and students' own cultural contexts foster global awareness and self-reflection. The course aims to develop critical thinking, intellectual empathy, and informed civic engagement, empowering students to thoughtfully examine identity, equity, and inclusion in France and beyond.

Prerequisite: French IV (L-431) or recommendation of the department
Restricted to: 11/12

LATIN

L-120 Latin I

Year 1 credit
Latin I introduces students to the manifold delights of Latin with the first book of Suburani: A Latin Reading Course. In the process of learning grammar and vocabulary from a graphic novel, Latin I students practice critical thinking and observational skills. Games, songs, and projects complement the textbook's reading- and writing-based approach. Students also learn about ancient Roman culture and history and their modern receptions as they master the language: A project on museums, including a trip to the Boston Museum of Fine Arts, is a highlight. Latin I focuses on the tenses of the indicative mood and the uses of all of the cases of nouns. By the end of the course, students are able to read simplified Latin texts. As they work, students gain a deeper, more precise understanding of English grammar and the grammar of other Indo-European languages they may study. In addition, they accumulate many root words which will serve them well in understanding college-level written English.

Open to: 9/10/11/12

L-220 Latin II

Year 1 credit
Latin II continues students' adventures in the language, culture, and history of the Romans. In the second book of Suburani: A Latin Reading Course, students encounter sophisticated grammar including participles and the subjunctive mood. As in Latin I, students practice critical thinking and observational skills while learning grammar and vocabulary from a graphic novel. Games, songs, and projects continue to complement the textbook's reading- and writing-

based approach. This work deepens and refines students' understanding of English grammar and the grammar of other Indo-European languages. By the end of the course, students have covered nearly all of the noun and verb inflectional system and have begun to examine authentic, Roman texts. This course also guides students to a deeper understanding of Roman culture and history and their modern receptions through increasingly complex readings and projects. In addition, they accumulate many root words which will serve them well in understanding college-level written English.

Prerequisite: Latin I (L-120) or recommendation of the department
Open to: 9/10/11/12

L-320 Latin III

Year 1 credit
Latin III brings students from studying grammar and reading textbook Latin to reading Latin literature "in the wild" with plenty of grammatical support. After a quick review of grammar from previous years, we finish Suburani: A Latin Reading Course. We then dive into love poetry and political oratory to explore themes including character and persona, gender, love, citizenship, and social class. Students learn about rhetoric and poetic meter, and they practice analyzing sentence structures, reading closely, and investigating how texts interact with their historical contexts. Wherever possible, experiential and project-based learning enrich our approaches to literature: Students reenact a political crisis of the late Roman Republic in preparation for studying Cicero's First Catilinarian Oration, for example, and compose their own speeches in Latin.

Prerequisite: Latin II (L-220) or recommendation of the department
Open to: 9/10/11/12

L-422 Latin IV: Literature and Empire

Year 1 credit
In Latin IV, students explore relationships between art and power in Rome's transition from republic to empire and in modern receptions of Roman literature. We begin by reviewing key grammatical structures while reading a modern

novella in Latin. Then, as we read passages from Vergil and Ovid, students practice analyzing texts in relation to their historical contexts, and they develop creative projects to explore specific questions in greater depth. As in Latin III, experiential and project-based learning enrich our approaches to literature: Students learn about manuscripts and the transmission of texts, for example, and then try their hands at textual criticism. Latin IV and AS Latin meet for class and work together.

Prerequisite: Latin III (L-320) or recommendation of the department
Restricted to: 11/12

L-423 Advanced Studies Latin IV: Literature and Empire

Year 1.5 credits
In AS Latin, students join ongoing, scholarly conversations about relationships between art and power in Rome's transition from republic to empire and in modern receptions of Roman literature. We begin by refining our understanding of key grammatical structures while reading a modern novella in Latin. Then, as we read passages from Vergil and Ovid, students practice technical skills such as parsing grammar and scanning meter; write short essays driven by close readings; and develop research projects to explore specific questions in greater depth. Experiential and project-based learning again enrich our approaches to literature: Students learn about manuscripts and the transmission of texts, for example, and then try their hands at textual criticism. An extended reading list, college-level research projects, and advanced methods of scholarship challenge students to think both deeply and expansively. Latin IV and AS Latin meet for class and work together.

Prerequisite: Latin III (L-320) or recommendation of the department
Restricted to: 11/12

SPANISH

L-160 Spanish I

Year 1 credit
Spanish I uses the textbook Panorama to introduce students to the basics of the Spanish language and helps build confidence in fundamental communication. Highlights include interviewing peers about daily schedules and pastimes, creating a presentation to introduce their family to a potential exchange student, researching sports and leisure activities across Spanish-speaking cultures, and studying the artwork of Mexican-American artist Carmen Lomas Garza. The course emphasizes high-frequency vocabulary and everyday topics while instruction focuses on mastering the present tense, including the present progressive, with attention to nuance that supports accurate and effective expression. Students engage in interactive learning through dialogues, skits, projects, and assessments. Throughout the course, students develop the four core language skills—listening, speaking, reading, and writing—while also building cultural awareness and communication skills.

Open to: 9/10/11/12

L-260 Spanish II

Year 1 credit
Continuing their journey with the Panorama series, students will solidify the linguistic foundation necessary to become confident, effective communicators. This course explores daily routines, culinary traditions, and the vibrant festivals of the Spanish-speaking world. A primary linguistic focus is the mastery of the two past tenses, which students will apply through immersive, experiential projects. Highlights include producing a "Get Ready With Me" video, conducting a restaurant critique, and curating a "living museum" of cultural history. Mid-year, students will deepen their cultural and literacy skills by reading the biography Lorena, la corredora and viewing its companion documentary. Throughout the course, students will sharpen the four core language skills—reading, writing, listening, and speaking—through collaborative dialogues, short compositions, and oral presentations.

Prerequisite: Spanish I (L-160) or recommendation of the department
Open to: 9/10/11/12

L-360 Spanish III

Year 1 credit
Building upon the foundations of Spanish I and II, this course empowers students to communicate effectively about complex issues impacting their daily lives. The curriculum integrates rigorous research with experiential learning, with

a primary linguistic focus on mastering the subjunctive mood. In the first semester, students conduct research into environmental challenges facing the Spanish-speaking world. The second semester shifts to a local lens, exploring Hispanic culture in New York City. Through the study of the novella La Nuevayorkina de Nuevayorkinos, students examine Dominican heritage and culminate their learning by designing a walking tour of El Barrio's street art. Emphasis is placed on advanced vocabulary acquisition and the refinement of both written and oral proficiency.

Prerequisite: Spanish II (L-260) or recommendation of the department
Open to: 9/10/11/12

L-460 Spanish IV

Year 1 credit
Spanish IV is where the language starts to make sense in new ways. This course takes the grammar and vocabulary students have been building and puts them into action, showing them not just what Spanish says, but how it really works. Students will explore the linguistic architecture of Spanish: how words are constructed, how prefixes and roots create families of meaning, how figurative language works across cultures. Through close reading of poetry, short fiction, news stories, and audio documentaries from across the Spanish-speaking world, students will encounter cultural practices that reflect the extraordinary diversity of Spanish-speaking communities and develop the skills to approach nearly any Spanish text with confidence. Class activities push students to think in Spanish rather than translate from English. Students will write an ode to their favorite food in the style of Pablo Neruda, invent a wild new festival inspired by Spain's Tomatina, and visit a museum to discuss art in Spanish. By the end of Spanish IV, they will have solidified their command of standard Spanish (its grammar, its logic, its creative possibilities) and begin to encounter the language as it's actually used in the world.

Prerequisite: Spanish III (L-360) or recommendation of the department
Restricted to: 10/11/12

L-567 Advanced Studies Spanish V: Voices and Variation Through Film

Year 1.5 credits
This is Spanish without a safety net. The course explores the language as it is used on the street, using short films to immerse students in voices from across the Spanish-speaking world. Students train their ears for language that is fast and unpredictable, shaped by group chats, humor, misdirection, and everyday interaction. The primary objective of the course is to build communicative endurance, the mental grit required to stay in the game when Spanish gets hard. Using tools from linguistics, students explore how Spanish varies across regions and lived realities. Through history, they investigate why. These frameworks provide a foundation for developing the practical skills needed to navigate ambiguity without freezing. Students learn to decode regional slang, recognize accents, and interpret social cues in real speech. By the end of the course, students will be able to walk into any Spanish-language situation, whether a film, a conversation, or a city they have never visited, and trust that they have the skills and endurance to handle it.

Prerequisite: Spanish IV (L-460) or recommendation of the department
Restricted to: 11/12

MATHEMATICS DEPARTMENT

Today's students will spend their adult lives in a world influenced by technology and quantitative methods. For this reason, every Emma Willard student is asked to focus on mathematics as a problem-solving tool.

To prepare our students for mathematics at any college or university, and to increase students' proficiency and confidence in all areas of mathematics, we teach with a variety of pedagogical methods. Students are exposed to traditional algebraic and problem-solving methods, and teachers frequently make connections between mathematics and its applications in other disciplines. As Emma Willard students progress through the mathematics curriculum, they learn to do more sophisticated work with technology, including graphing calculators, spreadsheets, and online tools such as Desmos.

It is increasingly important to prepare students for the study of both calculus and statistics, as many students will take both of these courses in college. Precalculus covers topics in both pre-calculus and pre-statistics mathematics and serves as the prerequisite for all fifth-level courses. After completion of Precalculus, students may be recommended by the department for some of the fifth-level courses, including Calculus (M-500), AS Statistics (M-540), and AS Calculus AB (M-550). Successful completion of AS Calculus AB qualifies students to take AS Calculus C with an Introduction to Multivariable Calculus (M-566). Advanced students may also have the opportunity to pursue independent work through a Practicum or a Signature project.

Finally, an understanding of computation and what we can and cannot do with computing devices is relevant to today's technological world. A variety of computer science electives teach coding to students in both the Java and Python languages.

Extracurricularly, students have the opportunity to participate in math and computer science competitions, such as the New York Mathematics League, the American Mathematics Competition, and the Siena College High School Programming competition. In addition, Emma Willard School hosts regular meetings of the Albany Area Math Circle, which brings together math-loving high school students from area schools to explore collaborative and recreational mathematics together, including some advanced topics not covered in standard curricula.

Independent Problem-Solving Skills at the 500-Level: By the time students study at the 500-level in mathematics, they should be independent, self-sufficient learners. They need to be able to employ many abstract theoretical concepts for success in these courses. A capacity for individual work and a high level of self-motivation are expected in and out of the classroom.

PLACEMENT

Upon enrollment, all new students complete a mathematics test to help determine placement.

GUIDANCE ON SUMMER STUDY: MATH

Summer enrichment courses can be a wonderful option for students who hope to extend their math education after school lets out. However, because math is best learned in an environment with time to reflect between lessons, we discourage students from attempting to replace a year or semester of deep learning with an accelerated summer course.

Sometimes, students consider summer study in order to reach calculus in their senior year. We want to support and encourage any student who wishes to pursue this goal, but generally recommend that these students take Geometry at the same time as Algebra 2, which sets them up to take calculus as seniors while ensuring that their foundation of knowledge and skills is strong.

Students who wish to prove mastery following completion of a summer course must complete the following steps:

Requirement

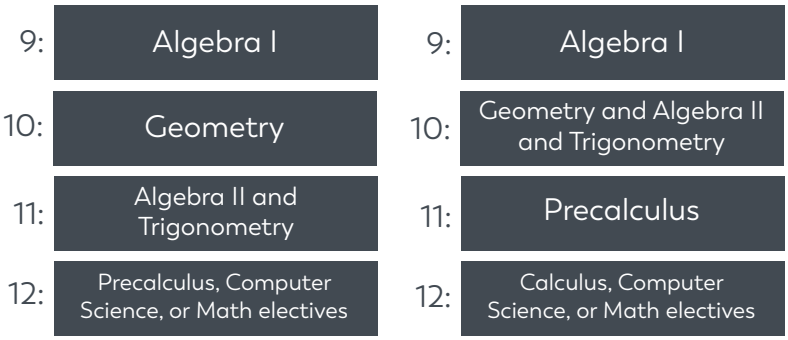
» **Register for the course that is your recommended next step.** You cannot register right now for the course you hope to place into.

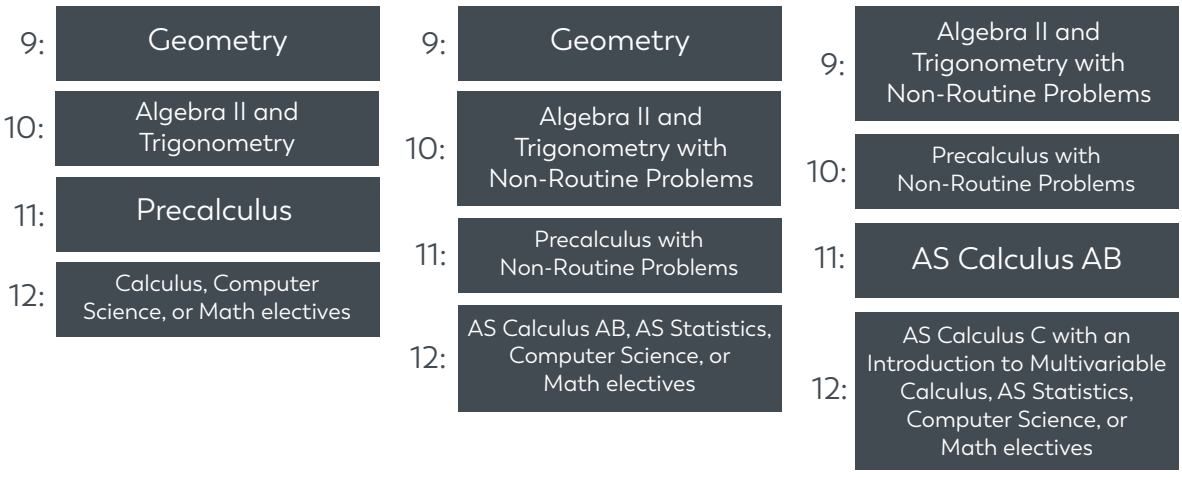
- **Inform the Math Department chair and class dean of your summer plans by, at the latest, June 1, 2026.** During course registration is preferable.
- **Enroll in an accredited summer course.** Accredited means the course is offered by a recognized school, preferably an independent school or a university.
- **When the summer course is complete, take a 90 minute mastery test. Students who earn 80% or higher are eligible to enroll in the next level course.** These mastery tests will be given once to each student on a predetermined date. Regular school testing policies apply.
- **On the day of the mastery test, in person, share a binder with all summer study course materials with the department chair. Failure to provide these materials at the start of your mastery test session means you will not be allowed to sit for the exam.** This includes:
  - The course syllabus
  - All notes taken during lessons/class
  - All graded assessments
  - All handouts, projects, and activities
  - A transcript showing successful completion of the course, demonstrating mastery with a grade of 80% or higher

Students should be aware that enrolling in a new math class may require them to make other schedule changes. Students are responsible for completing any summer work in advance of enrolling in the desired course.

COMMON COURSE SEQUENCES

Below are examples of some common sequences of math courses at Emma.





Note: The Math Department strongly recommends that students who plan to take Advanced Studies Calculus AB take both Non-Routine courses leading up to it.

COMPUTER SCIENCE COURSES

A computer science course may be taken in the same year as a math course, or computer science may be taken alone if the student has completed the math graduation requirement (successful completion of an Algebra II and Trigonometry class.)

Is it possible to "jump" from a routine level course to a non-routine level the next year? Yes! If you are consistently earning 95 or higher on tests and quizzes (prior to retakes or test corrections) in a routine level course, you may be recommended for the non-routine (or AS) level the next year. Under the same conditions, Algebra 1 students may be recommended to double in Geometry and Alg 2 during the next year.

M-115 Math Support I

Year 0.5 credit

This course is designed to help students enrolled in Algebra 1 improve their mathematical thinking skills through a concentration on numeracy, algebraic problem solving, and proportions. The course's main objective is to create a personalized strategy to meet each student's specific needs in math and science. Members of the course will work individually and in small groups and be taught by a math instructor. The instructor will provide customized feedback that identifies problem areas; the teacher will also provide instructions/support on how to strengthen these areas. Within this group, students will be encouraged to reach out whenever they need additional math support outside the classroom. Students take this course by recommendation of the mathematics department and the Learning Support Coordinator.

Corequisite: Algebra 1 (M-125)

M-125 Algebra I

Year 1 credit

In this course, students expand their notion of a variable and connect it to algebraic and problem-solving techniques. This is a comprehensive course that lays the foundation for both Geometry and Algebra II and Trigonometry. Topics include signed numbers, radicals and radical operations, functions and function notation, linear equations, systems of linear equations, exponents, the quadratic formula, polynomials, and factoring. Students in this course learn to translate verbal statements into mathematical statements, clarify procedural questions, solidify arithmetic skills, and work with the coordinate plane. Students explore linear, exponential and quadratic functions and their graphs in the context of real-world scenarios using technology.

M-215 Math Support II

Year 0.5 credit

This course is designed to help students enrolled in Geometry improve their mathematical thinking skills through a concentration on algebraic problem solving. The course's main objective is to create a personalized strategy to meet each student's specific needs in math. Members of the course will work individually and in small groups and be taught by a math instructor. The instructor will provide customized feedback that identifies problem areas and will also provide instructions/support on how to strengthen these areas. Students take this course by recommendation of the mathematics department and the Learning Support Coordinator to provide support for their work in mathematics and science classes.

Corequisite: Geometry (M-225)

M-225 Geometry

Year 1 credit

This course combines discovery, construction, technology, and proof-based explorations of plane geometry. Topics include understanding both inductive and deductive reasoning, polygon congruence and similarity, right triangle properties including trigonometry, parallel lines and associated angles, circle and line relationships, transformations, and areas/volumes. Students will regularly use manipulatives and physical tools of geometry to translate verbal geometric relationships into accurate diagrams to assist with problem-solving. Proficiency in basic algebra is expected and necessary.

Prerequisite: Algebra I (M-125)

M-315 Math Support III

Year 0.5 credit

This course is designed to help students enrolled in Algebra II and Trigonometry improve their mathematical thinking skills through a concentration on algebraic problem solving. The course's main objective is to create a personalized strategy to meet each student's specific needs in math. Members of the course will work individually and in small groups and be taught by a math instructor. The instructor will provide customized feedback that identifies problem areas and will also provide instructions/support on how to strengthen these areas. Students take this course by recommendation of the mathematics department and the Learning Support Coordinator to provide support for their work in mathematics and science classes.

Corequisite: Algebra II and Trigonometry (M-325)

M-325 Algebra II and Trigonometry

Year 1 credit

This course continues to develop independent problem-solving through an exploration of functions, including linear, quadratic, higher-degree polynomial, rational, exponential, logarithmic and trigonometric functions. With each function, students will consider properties of domain and range as well as graphs and skills of algebraic manipulation. Students are expected to reason independently and formulate questions based on insights into applications of the algebra previously studied.

Prerequisite: Geometry (M-225)
Corequisite: Geometry (M-225) with permission of Math Department Chair

M-326 Algebra II and Trigonometry with Non-Routine Problems

Year 1 credit

This course covers the same topics as M-325, but with an additional focus on developing students' understanding of the meaning of mathematical models. Most units will conclude with a laboratory assignment where students will apply regression analysis to a dataset and interpret the results in writing. To accommodate the substantial amount of time spent studying applications of functions to real-life, the pace of instruction will be rigorous and students will be expected to engage in substantial independent practice outside of class. This course is strongly recommended for students who aspire to take AS Calculus AB prior to graduation.

Prerequisite: Geometry (M-225) and recommendation of the department
Corequisite: Geometry (M-225) with permission of Math Department Chair

M-340 Introduction to Coding with Python

Fall 0.5 credit

Python is known for being a great introductory language for those who are new to coding. Students in this half-year course will learn the basics of Python, including printing, performing mathematical calculations, understanding variables and how to use them, writing conditional statements (if statements) and loops (for loops and while loops), creating and using functions, and working with lists and tuples. Students will work on a series of mini-projects that encourage creativity and problem-solving skills. This work will culminate in a final project of their choice, showcasing their ability to write and understand Python code. The foundational understanding gained in this course can be built upon in further Computer Science courses, either at Emma or beyond.

Prerequisite: Geometry (M-255). No prior coding experience is necessary.

M-440 Thinking Mathematically

Fall 0.5 credit

In today's world it is becoming increasingly necessary for every citizen to approach mathematical thinking with confidence and competence. Topics covered in this course include set theory, number theory, equations, inequalities, graphical representations, and linear programming. Students will also explore real-world applications of data science. Assessments include tests and quizzes as well as projects that incorporate data collection and interpretation.

Prerequisite: Algebra II and Trigonometry (M-325 or M-326)

M-446 Quantitative Reasoning

Spring 0.5 credit

Mathematics provides tools to help solve problems in daily life, business, finance, and society. In this course, students dive into rich, open-ended, real-world problems and apply mathematical analysis to help make decisions. Students will develop their critical thinking skills and learn to use tools like spreadsheets and graphing applications to model, analyze, and problem-solve in a variety of situations. For example, students might explore how long it would take for a solar

panel installation to pay for itself or examine data to determine if there is equitable access to certain programs. The course will be run as a series of mini-projects and activities and will culminate in a final project where students perform an in-depth analysis of a situation of their choice.

Prerequisite: Prerequisite: Algebra II and Trigonometry (M-325 or M-326)

M-445 Financial Literacy

Spring 0.5 credit

This course is designed for students interested in learning how to use money to achieve financial stability and freedom. In Financial Literacy, students are introduced to numerous concepts related to how money works in the modern world. Topics include budgeting, evaluating savings and investment methods, and taxes. Special focus will be given to understanding compound interest of assets and debts, as well as balancing investment risk and reward. Students will study various types of taxes and how different savings methods affect tax liability. This course involves independent and project-based work, as well as course-related reading and some writing and research.

Prerequisite: Algebra II and Trigonometry (M-325 or M-326)

M-450 Precalculus

Year 1 credit

This course is designed for students who have mastered the study of basic trigonometry, geometry and algebra. Students are introduced to various areas of study in higher-level mathematics. Topics may include advanced trigonometry, combinatorics and probability, modeling with functions, analytic geometry, series, and limits. The successful student in this course will employ effective questioning skills—not just procedural, but analytical—and a range of methods when problem-solving. Students will be responsible for significant independent work, assessing their own progress, and seeking help outside of class as needed. Students will complete a summer assignment for this course.

Prerequisite: Algebra II and Trigonometry (M-325 or M-326) and recommendation of the department.

M-460 Precalculus with Non-Routine Problems

Year 1 credit

This course is designed for students who have especially strong backgrounds in basic trigonometry, geometry and algebra. In addition to the topics explored in M-450, students in this course will study complex numbers, polar coordinates, polynomial theorems, statistics, and matrices. In addition, students examine non-routine problems which will require creative problem-solving skills and quantitative writing. The successful student in this course will be able to do independent work, and be comfortable initiating discussions as well as asking questions. Students should expect to draw from a variety of problem-solving skills to pursue not only the mechanics of problem-solving but also the concepts behind the problem. Students will complete a summer assignment for this course.

Prerequisite: Algebra II and Trigonometry (M-325 or M-326) and recommendation of the department

M-500 Calculus

Year 1 credit

This year-long introductory calculus course covers limits and continuity, differential calculus, and integral calculus through substitution methods for integration. Emphasis is placed on problem solving and deep conceptual understanding. This course is well suited for students interested in further study in mathematics, engineering, and the physical sciences beyond high school and prepares students well for a college-level Calculus 1 class including AS Calculus AB.

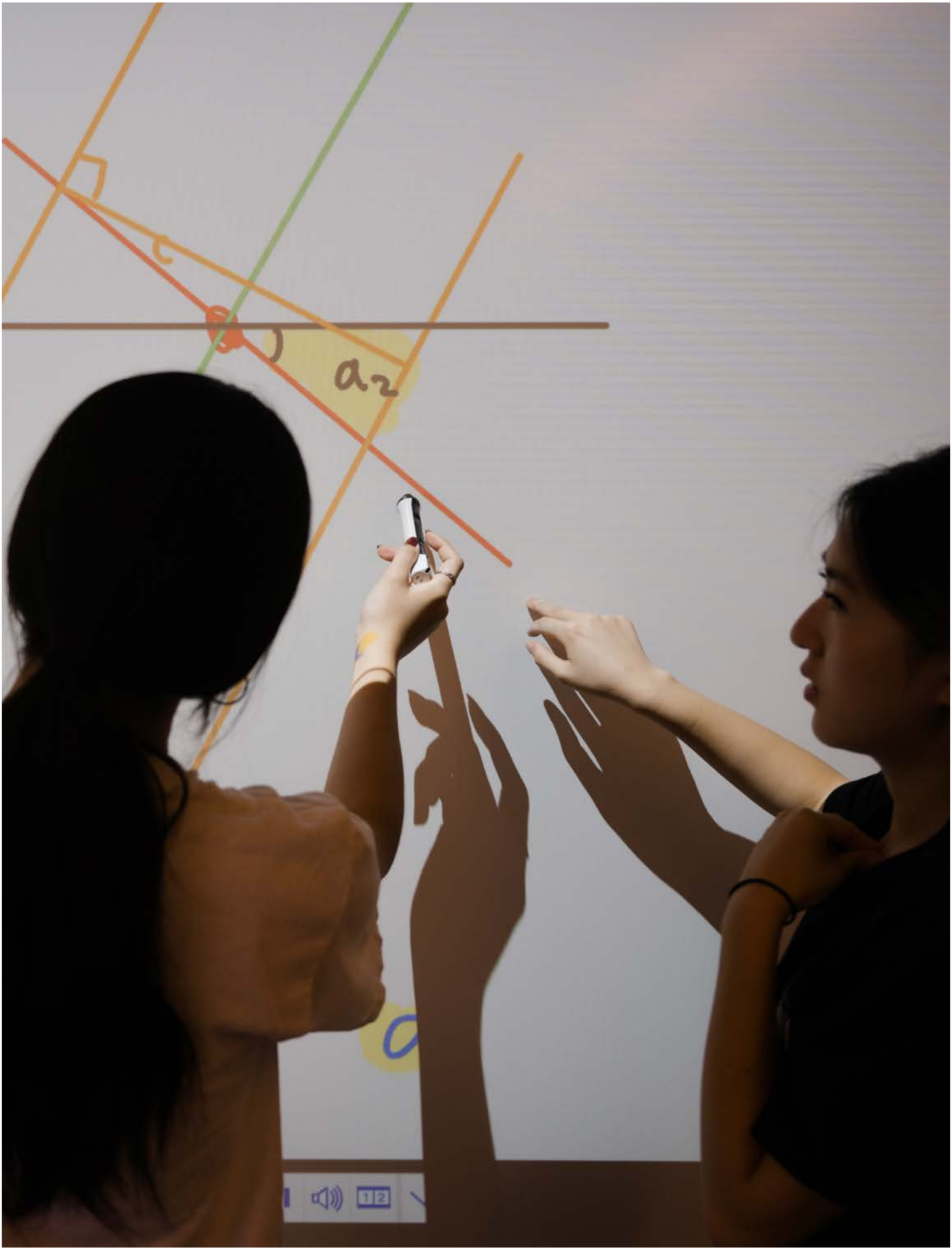
Prerequisite: Precalculus (M-450 or M-460) and recommendation of the department

M-530 Advanced Studies Computer Science Explorations

Year 1.5 credits

Have you ever wondered how photos and sounds are stored in your phone? How machine learning and artificial intelligence work? How objects are animated to move across a screen? Computer Science Explorations is a survey course of the many branches of computer science: from coding to ciphers; digital information to machine learning, computer vision, and artificial intelligence; the history to the future of computing devices. Students will gain an understanding of the impacts (both positive and negative) of computing innovations and develop coding skills that can help launch creative solutions to real-world problems. A summer assignment consisting of about 12 hours of independent, introductory coding will be required (lessons with videos will be provided).

Prerequisites: Geometry (M-225) and English I (E-100). Students do not need to have prior knowledge of any programming language. Students do not need a recommendation to request this course.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M-540 Advanced Studies Statistics

Year 1.5 credits

This course offers a thorough examination of data analysis, data production, and statistical inference. Topics include the normal distribution, correlation and regression, experimental design, sampling distributions, probability theory, confidence intervals, tests of significance, and the Chi-Square Test. Diverse areas such as economics, medicine, and politics are incorporated into discussions of statistical topics. Students should expect significant reading, written analysis, and interpretation as parts of statistical inference. As with other AS courses, additional assignments may be given over school vacations, and summer work is required.

Prerequisite: Precalculus (M-450 or M-460) and recommendation of the department

M-550 Advanced Studies Calculus AB

Year 1.5 credits

This course develops the theory and presents some applications of differential and integral calculus. Courses content includes limits, continuity, derivative functions, and the definite integral. Derivative rules and applications complete the study of differential calculus. Development of the fundamental relationship between differential and integral calculus is followed by additional work with integrals and their applications. Students should expect a substantial summer assignment.

Prerequisite: Precalculus (M-450 or M-460) and recommendation of the department

M-556 Advanced Studies Computer Science with Java

Year 1.5 credits

This course introduces students to the fundamentals of programming and problem solving using the JAVA language. The course involves the design and implementation of computer programs to solve problems. Students will gain an understanding of the core aspects of computer science, which can be used to create solutions that are understandable, adaptable and when appropriate, reusable. The course introduces students to computer programming with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), and analysis of potential solutions. Students must have some introductory background in programming to be successful in this course. As with other AS courses, additional assignments should be expected over school vacations, and a substantial summer assignment is required.

Prerequisites: Algebra II & Trigonometry (M-325 or M-326) and the equivalent of AS Computer Science Explorations (M-530) or another introductory programming course as approved by the department chair and recommendation of the department

M-566 Advanced Studies Calculus C with an Introduction to Multivariable Calculus

Year 1.5 credits

This course is a continuation of AS Calculus AB (M-550). Topics include integration by parts and by partial fractions, improper integrals, curve length, infinite series, and parametric and polar functions. The Multivariable Calculus portion of the course will cover the following topics: the 3-space coordinate system and relationships within it, including vectors, lines, and planes; quadric surfaces, functions of two variables, partial derivatives, and gradients. As time permits, additional topics may be covered. This course will provide students with a solid foundation for success in college Calculus III and is helpful for students who plan to study engineering, math, physics or chemistry in college. Students should expect a substantial summer assignment.

Prerequisite: AS Calculus AB (M-550) and recommendation of the department

CONTINUED LEARNING

Students who successfully complete M-566 Advanced Studies Calculus C with an Introduction to Multivariable Calculus before their senior year may take online courses in Linear Algebra, Multivariable Calculus, and/or Differential Equations through One Schoolhouse in subsequent years. These courses do not count as AS courses.

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SCIENCE DEPARTMENT

"What's happening? Why? How can you explain it?" Emma Willard students work to answer these questions. As educated people they should understand natural and physical processes and know how to approach problems rationally and methodically. To this end, the science program engages students in discussion, group work, laboratories, digital simulations, experimental design, and research projects.

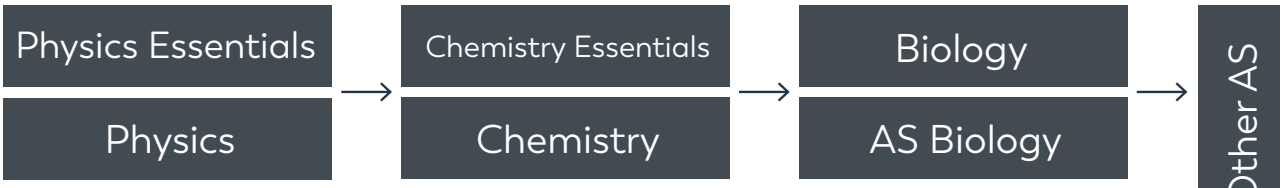
Students in science classes learn to read, understand, and interpret verbal, mathematical, and graphical information. They learn to analyze and describe scientific phenomena and problems through a series of steps including modeling, recognition and application of fundamental principles, and interpretation of results. Students develop mathematical reasoning skills within a scientific context using arithmetic, algebraic, geometric or trigonometric methods. Finally, they perform experiments, interpret the results, and assess experimental errors.

In fulfilling the science requirements, students master the groundwork for college study in the life and physical sciences.

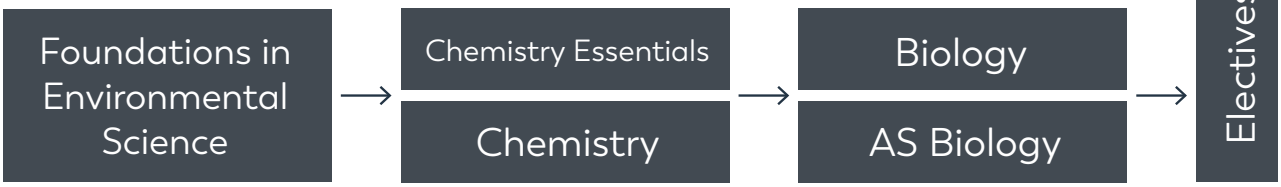
WHICH SCIENCE COURSE SHOULD I TAKE NEXT?

This is a general pathway to show the progression of science courses. Many students come to Emma with unique science backgrounds and may take a path different from this one. Additional information about each course can be found in the course descriptions below.

For students who are the Class of 2029 and earlier:



For students who enter in the 2026–2027 school year or beyond:



If your current course is Physics or Physics Essentials, consider taking:

- Chemistry Essentials S-200
- Chemistry S-210
- AS Physics I (note: you must take a chemistry course to graduate)

If your current course is Chemistry or Chemistry Essentials, consider taking:

- Biology S-300
- AS Biology S-500
- AS Chemistry S-510 (note: you must take a biology course to graduate)

If your current course is Biology, consider taking:

- Electives
- AS Science Course

GRADUATION REQUIREMENTS

Incoming 9th graders must complete three credits of laboratory science, including one year of environmental science, chemistry, and biology. Incoming 10th, 11th, or 12th graders must complete two credits of laboratory science during their high school career, including one year of physical science and one year of natural science:

- Physical science laboratory courses for 10s, 11s, 12s: Chemistry, Chemistry Essentials, AS Chemistry, AS Physics I, AS Physics II
- Natural science laboratory courses for 10s, 11s, 12s: Biology, AS Biology, Environmental Science & Policy

S-125 Foundations in Environmental Science

Year 1 credit

How can laws, measurements, and mathematical relationships be used to create models for environmental systems, and how can these models be used to predict the impacts of changes in an environmental system? How can humans balance society's interests and needs while sustainably interacting with the environment? Overarching questions like these serve as the foundation for this course. After gaining an understanding of introductory science skills and lab techniques, students will explore topics and issues related to environmental science and sustainability. This course addresses concepts from biology, chemistry, and physics to contextualize the interdisciplinary nature of environmental science. Students will explore real-world environmental issues that ask them to interpret, analyze, and communicate their understanding of both the science and the impact on society. Learning will be measured using various assignments and assessments, which include but are not limited to quizzes, tests, laboratory investigations, and collaborative projects.

Restricted to: 9 (10, by department chair recommendation)

S-200 Chemistry Essentials

Year 1 credit

This is an introductory course in general chemistry designed to move through topics at the students' pace. Students study basic and advanced concepts including atomic and molecular structure, periodic relationships, chemical formulas, reactions, molar quantities, properties and states of matter, bonding, and solutions. The ability to solve and discuss problems, both individually and in groups, is emphasized. Evaluations include tests, quizzes, lab write-ups, and projects. This class provides an active learning environment and hands-on experimentation to supplement learning. This class will involve both quantitative and qualitative reasoning, with an emphasis on visualizing the behavior of atoms and molecules and how this behavior gives rise to our macroscopic environment.

Prerequisite: Algebra I (M-125) and Physics (S-100 or S-110)
Restricted to: 10/11/12

S-210 Chemistry

Year 1 credit

This is an introductory course in general chemistry designed for students who have a particular interest in science and are comfortable applying algebra skills. Students study basic and advanced concepts including atomic and molecular structure, periodic relationships, chemical formulas, reactions, molar quantities, properties and states of matter, bonding, thermochemistry, and solutions. The ability to solve and discuss problems, both individually and in groups, is emphasized. Evaluations include projects, laboratories, tests, and quizzes. This class provides an active learning

environment and hands-on experimentation to supplement learning. Compared to Chemistry Essentials (S-200), this class will involve a greater depth and more emphasis on analytical reasoning and extensive quantitative problem-solving.

Prerequisite: Algebra I (M-125) and Physics (S-100 or S-110)
Restricted to: 10/11/12

S-310 Biology

Year 1 credit
This course explores the interdependence and diversity of the biological world. Common themes such as levels of organization and structure and function are examined as students develop a conceptual understanding of anatomy and physiology, genetics, evolution, and ecology. Students assimilate theory and application through class discussions, hands-on projects, and laboratory activities. Assessments include unit tests and quizzes, lab reports, projects, and presentations. Students should be prepared to spend time outside of class preparing for discussions by reading various texts, completing virtual simulations, and watching videos.

Prerequisite: Physics (S-100 or S-110) and Chemistry (S-200 or S-210)
Restricted to: 11/12

S-403 Foundations in Organic Chemistry

Spring 0.5 credit
Foundations in Organic Chemistry is a course designed to be taken after the successful completion of a full-year introductory Chemistry course. Students should come into this course with an understanding of the periodic table, chemical reactions, and bonding. This course builds on these concepts and includes topics drawn from organic chemistry with an emphasis on drawing and interpreting organic structures, identifying functional groups, and discovering how the structure determines the function of an organic molecule. Students should have a solid foundation in laboratory techniques, including performing reactions and representing data using tables and/or graphs, as these skills will be applied to simple organic reactions and purification methods.

Prerequisite: Chemistry (S-200 or S-210)
Restricted to: 11/12

S-405 Genetics

Fall 0.5 credit
This course builds on the student's existing knowledge of the transmission and function of hereditary material. Principles of genetics learned in Biology and/or AS Biology will be explored in greater depth, such as the expansion of population genetics to include mutation, selection, and inbreeding. The course briefly reviews the basics of genetics before moving on to the inheritance of complex traits and chromosomal abnormalities. The major focus of the course is understanding the relationship between affected proteins and the development of a disease phenotype. Students will develop an understanding of genetic engineering and individualized medicine and will leave the course with the ability to intelligently discuss the benefits and risks of manipulating the genome in humans. This course relies on traditional note-taking and does not involve the laboratory in any aspect. Students will be assessed in traditional forms such as in-classroom tests, quizzes, and essays. The ability to discuss and reflect on ethical considerations to genetics work is an important aspect of the course. The semester will end with a culminating paper-project that ties together upper level scientific research and empathetic understanding of the impact of human disease on affected families. Students may, but are not required to, continue on to S-406 Genetics Lab.

Prerequisite: Biology (S-310) or AS Biology (S-500)
Restricted to: 10/11/12

S-406 Genetics Lab

Spring 0.5 credit
This course is designed to prepare a student for performing primary research in the biological sciences while learning principles of experimental genetics in a concrete, tangible way. Laboratory investigations will supplement class discussion and the student will learn microbiological techniques, which are currently used in primary genetics research laboratories, including polymerase chain reaction and the use and analysis of DNA gels. Students will be assessed by the quality of their laboratory submissions and content-related quizzes. Note: It is not necessary to complete Genetics S-405 in order to enroll in S-406 Genetics Lab.

Prerequisite: Biology (S-310) or AS Biology (S-500)
Restricted to: 10/11/12

S-407 Marine Biology
Fall 0.5 credit
Although the ocean covers about 71% of Earth's surface, much of it has yet to be explored. Marine Biology is a broad topic that studies oceanography, ocean life, and interactions of organisms with the environment as scientists continually learn more about this under-explored realm. This course first examines the key geological features that define the ocean, ocean chemistry, and physical oceanography. Then we will explore the different types of life found in ocean environments ranging from single celled organisms to marine mammals, and finally investigate their relationships with one another as well as abiotic factors in marine ecology. Though less frequent, we will use labs including plankton identification and ocean acidification investigations to supplement our course curriculum. This course does not fulfill the biology graduation requirement.

Co- or Prerequisite: Biology (S-310)
Restricted to: 11/12

S-410 Neuroscience
Year 1 credit
What does it mean to be "split-brained?" Is Sign Language truly a "language?" What happens in your brain when a memory is made? Through an in-depth examination of the brain from both a biological and a psychological perspective,

students continue to develop their conceptual and analytical thinking skills. Areas of study include brain anatomy and development, language, memory, and nervous system disorders such as Autism, schizophrenia, Parkinson's Disease and Alzheimer's Disease. Coursework includes an assortment of scientific readings including news articles and non-fiction books, complemented by videos and in-class discussions. The course also includes a daily mindfulness practice. Evaluation is based on engagement in class, tests, presentations, papers, and projects.

Co- or Prerequisite: Biology (S-310)
Restricted to: 11/12

S-430 Astrobiology

Fall 0.5 credit
Have you ever wondered if we are alone in the universe? Astrobiology is the study of life in the universe and the search for life beyond Earth. In this course, we will study planetary and stellar processes, as well as how life evolved on Earth. We will attempt to answer the questions, "How does life originate, how does life evolve, and what might life be like on another planet?" We will focus on the current research being done and learn how astrobiologists are able to judge which far away planets are likely to support life. Finally, we look at how to search for intelligent life beyond Earth and examine possible methods of communicating with distant life forms. This course does not fulfill the biology graduation requirement.

Restricted to: 10/11/12

S-459 Anatomy & Physiology

Spring 0.5 credit
How do muscles contract? How does electricity control the heart's rhythm? Why do feet swell during pregnancy? In this course, we will learn about the human body's structure and function, often through a medical lens. Students will learn basic anatomy of major body systems using diagrams and physical models. We will study topics including the cardiovascular system, skeletal system, muscular system, and reproduction. Student experiments will use sensors to investigate how their lungs, heart, and muscles function. Classes will consist of experiments, readings, discussion, quizzes, tests, projects, and student presentations.

Restricted to: 10/11/12

S-470 Environmental Science & Policy

Year 1 credit
At its core, environmental science is an interdisciplinary field that draws on scientific concepts and applies them to social and environmental issues. The fall semester adopts a global theme and covers topics such as environmental systems, biodiversity, renewable and nonrenewable energy, and climate change and disruption based on student interest. The spring semester adopts a human impact theme and covers topics such as land use and conservation, air pollution, water resources and pollution, waste generation and disposal, politics, and environmental ethics based on student interest. This course will emphasize the intersection of science, society, and sustainability. As students explore complicated environmental issues, they will be encouraged to draw their own conclusions as to how to best solve these complex problems. Students will investigate course content through in-class labs, field work, case studies, class discussion, and debate. This course does not fulfill the natural science graduation requirement.

Prerequisite: Chemistry (S-200 or S-210)
Restricted to: 11/12

S-500 Advanced Studies Biology

Year 1.5 credits
This is a college-level course that examines the principles of ecology, cellular life, inheritance, evolution, diversity, and organismal structure and function. Laboratory explorations in each of these topics provide the student with the opportunity to ask questions, collect and analyze data, draw conclusions, and assess sources of error. Students will apply what they're learning to real world situations, requiring students to think outside the box. Critical thinking, problem solving, and experimental analysis are all central to the course. While this course aligns with parts of the Advanced Placement™ curriculum, it does not prepare students fully for the AP exam.

Prerequisites: Chemistry (S-200 or S-210); permission of the department
Restricted to: 11/12

S-510 Advanced Studies Chemistry

Year 1.5 credits
Advanced Studies Chemistry is a second course in a sequence of high school chemistry courses that provides students

with a college-level foundation to support future studies in the subject. Major credits in the course include gasses, chemical reactions, stoichiometry, atomic structure and bonding, kinetics, equilibrium, and thermochemistry. Students are expected to come into this course with a strong understanding of the periodic table, chemical reaction basics (i.e. writing and balancing chemical equations), stoichiometry, behavior of gasses, solutions, bonding and molecular geometry (i.e. Lewis structures). Concepts in this course are supplemented with a rigorous lab curriculum. Students should have a solid foundation in laboratory techniques, including but not limited to, performing chemical reactions, isolating pure substances, and representing data using tables and/or graphs. As mathematical problem-solving skills are a central component of this course, students must have a strong mastery of algebra with respect to manipulating variables, using dimensional analysis, and working with exponents and logarithms. While this course aligns with parts of the Advanced Placement™ curriculum, it does not prepare students fully for the AP exam.

Prerequisites: Chemistry (S-200 or S-210, S-210 preferred); Algebra II & Trigonometry (M-325 or M-326); and permission of the department
Restricted to: 11/12

S-523 Advanced Studies Physics I

Year 1.5 credits
Advanced Studies Physics I provides students with the skills and insights needed to explain the natural world. Students are introduced to the major topics they would meet in a rigorous introductory college course: 1D and 2D kinematics, 1D and 2D dynamics, uniform circular motion, work and energy, momentum and rotational motion. The course also includes a hands-on laboratory component comparable to introductory college-level physics laboratories.

Prerequisites: Algebra II and Trigonometry (M-325 or M-326) and permission of the department
Restricted to: 10/11/12

S-525 Advanced Studies Physics II

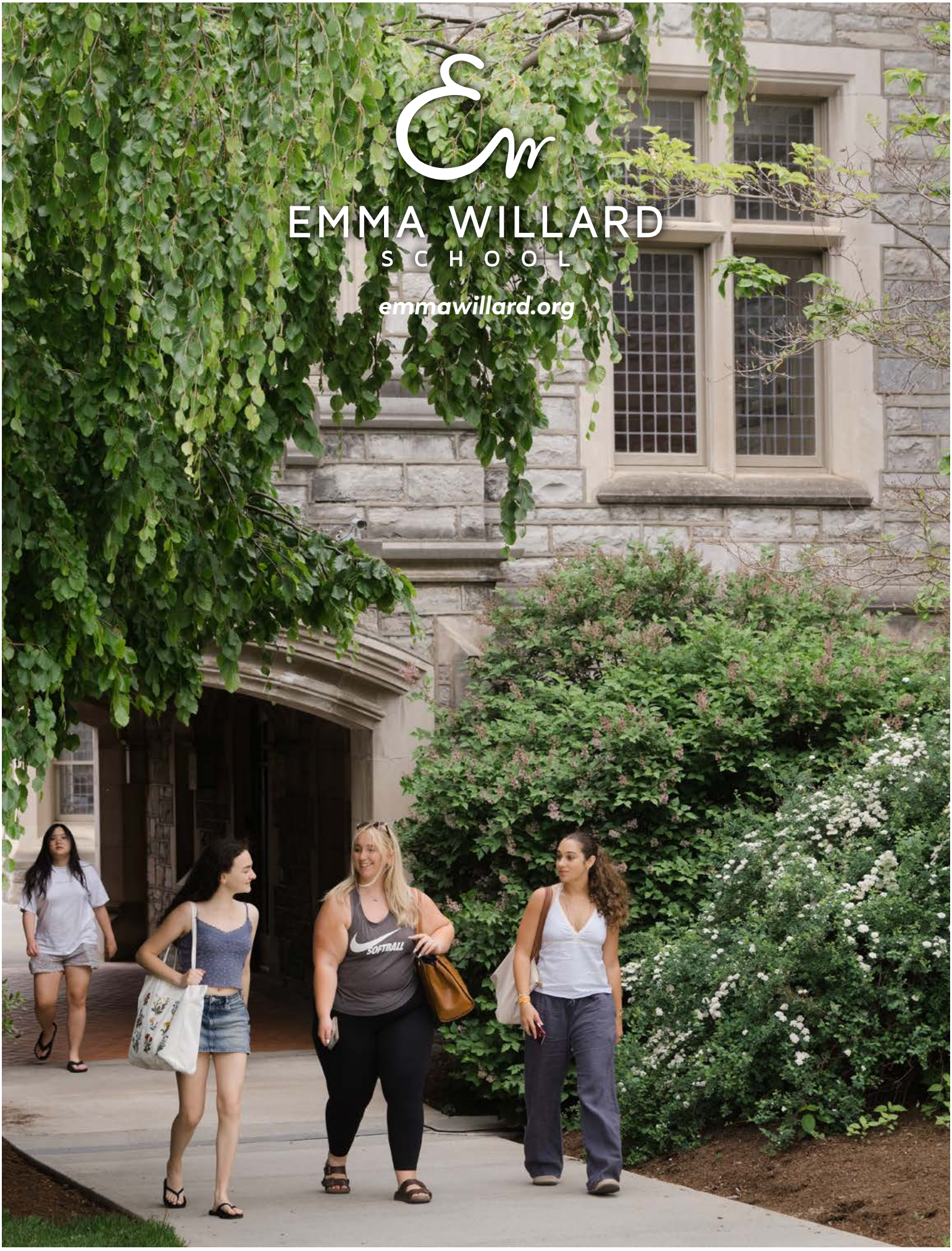
Year 1.5 credits
Imagine a world where fluids dance, light bends and the tiniest particles hold the key to the cosmos. These are some of the phenomena we will study in AS Physics II as students learn about fluids, electricity, modern physics, optics and other advanced physics topics. In this course, students will perform hands-on experiments using sophisticated equipment to explore phenomena and derive mathematical models. Students will also sharpen their scientific thinking as they tackle open-ended questions and projects that apply physics to real-world problems. This course assumes a solid understanding of the concepts covered in a foundational physics course, such as kinematics, forces, energy and momentum. This course builds upon this knowledge, delving deeper into advanced topics and exploring their interconnected nature.

Prerequisites: Algebra II and Trigonometry (M-325 or M-326) and AS Physics I (S-523), as well as permission of the department.
Restricted to: 11/12

S-526 Advanced Studies Entomology

Spring 0.75 credit
Insects comprise nearly 80% of animal life and, with nearly 10 quintillion individuals on Earth, play an incredible role in shaping ecosystems and the human experience. Entomology is the study of insects. In this course we will focus on identifying and classifying major insect groups while maintaining a focus on how the anatomy, physiology and behavior of these animals determines how they interact with humans and the environment. Major topics covered include (but are not limited to) pollination, food sustainability, social behavior, and development. This course does involve interaction with living insect specimens. This course does not fulfill the biology graduation requirement.

Prerequisite: Physics (S-100 or S-110)
Restricted to: 10/11/12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