

## Course Catalog




# Madeira's Mission 

## Launching Women Who Change the World

## Educational Philosophy

At Madeira, we believe: Learning is active and experiential, joyful and personal. Guided by caring, expert, demanding teachers who model the School's values, students learn in various settings, from classroom to playing field, to dormitory, to congressional office. Working toward one's personal best deepens the habits of mind that lead to lifelong learning. Learning is its own reward.

Learning results from an intentionally designed, innovative, developmental, rigorous and girl-centered curriculum, which builds critical thinking, creativity and problem-solving skills. Each student has opportunity to study discrete disciplines as well as explore connections between and across disciplines and learning environments.

Learning's purpose is not only for students to obtain the skills needed to thrive at college but also for students to understand themselves in relation to others, to be informed about their changing world, and to participate actively and confidently in life through leadership and service.


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# Graduation Requirements 

# Graduation Requirements for Students Who Entered in 9th Grade Class of 2026 and Class of 2027 

| SUBJECT | REQUIREMENT |
| :---: | :---: |
| Art | 3 credits |
| Co-Curriculum | 3 one-mod internships (one in 10th, 11th, and 12th) |
| English | 12 credits (3 credits per year) |
| History | 9 credits + 1 credit of research, currently earned in US History (must include 9th, 10th, 11th grade history courses) |
| Mathematics | 12 credits |
| Science | 9 credits <br> (must include Biology, Physics, and Chemistry) |
| World Languages* | 9 credits |
| Interdisciplinary | Must complete student life and STEAM Fundamentals course, one Coding credit |
| Activities | 9th and 10th grade - 3 seasons yearly, <br> at least two of which must be team experiences. <br> 11th and 12th grade - if Co-Curriculum internship is during the school year, no $D$ block requirement during the season in which the internship falls, with a few exceptions (see course descriptions). Of the remaining 2 required, at least 1 must be movement related. |

[^0]
# Graduation Requirements for Students Who Entered in 9th Grade Class of 2024 and Class of 2025 

| SUBJECT | REQUIREMENT |
| :---: | :---: |
| Art | 3 credits |
| Co-Curriculum | 3 one-mod internships (one in 10th, 11th, and 12th) |
| English | 12 credits (3 credits per year) |
| History | 9 credits + 1 credit of research, currently earned in US History (must include 9th, 10th, 11th grade history courses) |
| Mathematics | 12 credits |
| Science | 9 credits <br> (must include Biology, Physics, and Chemistry) |
| World Languages* | 9 credits |
| Interdisciplinary | Must complete student life and STEAM Fundamentals course, one Interdisciplinary credit, one Coding credit |
| Activities | 9th and 10 th grade -3 seasons yearly, at least two of which must be team experiences. <br> 11th and 12th grade - if Co-Curriculum internship is during the school year, no $D$ block requirement during the season in which the internship falls, with a few exceptions (see course descriptions). Of the remaining 2 required, at least 1 must be movement related. Or arrange with the Academic Office to be grandmothered in. |

[^1]
# Graduation Requirements for Students Who Entered in 10th Grade Class of 2026 

| SUBJECT | REQUIREMENT |
| :---: | :---: |
| Art | 3 credits <br> (Or full-year credit in visual or performing arts at previous school) |
| Co-Curriculum | 3 one-mod internships (1 in 10th, 11th, and 12th) |
| English | 9 credits (3 per year) |
| History | 6 credits + 1 credit of research, currently earned in US History (must include 10th and 11th grade history courses) |
| Mathematics | 9 credits |
| Science | 6 credits (must show completion of Biology, Physics, and Chemistry) |
| World Languages* | 6 credits |
| Interdisciplinary | Must complete one Coding credit at Madeira (Or credit from previous school) |
| Activities | 9th and 10th grade - 3 seasons yearly, <br> at least two of which must be team experiences. <br> 11th and 12th grade - if Co-Curriculum internship is during the school year, no $D$ block requirement during the season in which the internship falls, with a few exceptions (see course descriptions). Of the remaining 2 required, at least 1 must be movement related. |

[^2]Placement in the International Student English program is part of the admission decision.

# Graduation Requirements for Students Who Entered in 11th Grade Class of 2025 

| SUBJECT | REQUIREMENT |
| :---: | :---: |
| Art | 3 credits (Or full-year credit in visual or performing arts at previous school) |
| Co-Curriculum | 2 one-mod internships (1 in 11th and 12th) |
| English | 6 credits (3 credits per year) |
| History | 3 credits + 1 credit of research, currently earned in US History (must include 11th grade history course) |
| Mathematics | 6 credits |
| Science | 3 credits (must show completion of Biology, Chemistry, and Physics) |
| World Languages* | 3 credits (of the same language) |
| Interdisciplinary | Must complete one Coding credit at Madeira (Or credit from previous school) |
| Activities | 11th and 12th grade-if Co-Curriculum internship is during the school year, no $D$ block requirement during the season in which the internship falls, with a few exceptions (see course descriptions). Of the remaining 2 required, at least 1 must be movement related. |

[^3]Placement in the International Student English program is part of the admission decision.


## Course Selection Process \& Timeline

## New Student Course Registration:

Please be on the lookout for more information from the Academic Office regarding course registration for new students.

## What to expect each month:

APRIL A letter with course registration information will be sent to the newly admitted student and family. New students take the Math and World Language placement tests the end of April.

MAY Families will schedule virtual meetings with the Academic Dean to discuss Academics for the 2023-2024 school year.

JULY Schedules are posted in the student portals. A survey will be available for students to add electives.

## Returning Student Course Registration:

What to expect each month:
MARCH A letter with course registration information will be sent to all returning students and families. Course registration forms will be posted in the student portal.

Course Registration forms and $D$ block forms are due by
 March 10th in person to the Academic Office or emailed to courseregistration@madeira.org.

APRIL Students will have the opportunity to meet with the Academic Office to discuss their courses for the following year during Mod 6.

MAY Summer work and textbook information available.

JULY Schedules are posted in the student portals. A survey will be available for students to add electives.

## Additional Information

## Textbooks:

Madeira partners with Follett to help facilitate the purchase of textbooks and digital content. Students may purchase textbooks from any supplier. Many of the textbooks come in a digital format that students may purchase. If you are purchasing books from an alternative supplier, please check the ISBN carefully. Title, author, and ISBN information can be found through www.madeira.bkstr.com. There is important information about textbook options and requirements listed under the "Section Notes" for many courses. Please read these notes carefully prior to purchasing. Follett's ordering system defaults to the lowest cost option. This is often the "rent" option. Please make sure to select the preferred purchasing option. All students are expected to have their textbooks for the first day of class.

## Summer Work:

Some courses have summer reading or work. To access the summer work assignments, go to the 20232024 Summer Work Canvas page. This is best accessed through the Madeira website under Quick links, click Canvas. You will need to log in to your Microsoft 365 account to view this content. You will also see a tab for Textbooks and Supply Lists. If you do not see summer work listed for a particular course, there is no summer work for that course. Please confirm your schedule before starting any course summer reading or work.

## Summer work will not be accessible until May.

## Summer Math Courses through Madeira:

Madeira will offer two virtual math courses this summer. For more information regarding tuition and how to register, please ask the Academic Office during your course registration meeting.

Algebra II: (June 19 - July 28) This course extends the algebraic principles learned in Algebra I, including an exploration of different number systems such as radical, complex numbers, and matrices. Students will study the algebraic and graphical properties of a wide variety of functions including quadratic, polynomial functions, radical, rational, trigonometric, exponential, and logarithmic. This course will be taught online and asynchronous with due dates for assessments and regularly scheduled virtual office hours so that students can connect with their teachers as needed. Due to the accelerated pace of this class, one Module at Madeira will take place over roughly two weeks.

Precalculus and Trigonometry: (June 19 - July 28) This course focuses on extending topics from Algebra II, including quadratic, polynomial, radical, rational, exponential, and logarithmic functions. New units, such as conic sections, sequences and series, trigonometric functions and identities, limits, and the definition of the derivative will be introduced. This course is designed for students who will proceed to the concepts in Calculus. This course will be taught online and asynchronous with due dates for assessments and regularly scheduled virtual office hours so that students can connect with their teachers as needed. Due to the accelerated pace of this class, one Module at Madeira will take place over roughly two weeks. The first four weeks of this class are equivalent to the two modules of Precalculus, and the final two weeks are equivalent to the single module of Trigonometry.

## About D-block

## D-BLOCK PHILOSOPHY:

At Madeira we believe that D-block, which is the experiential wing of the academic curriculum, allows students:

- Develop a passion outside the academic realm
- Explore or deeply dive
- Be part of something larger than themselves
- Hone, practice and apply leadership skills
- Create their own path
- Build healthy habits to last a lifetime


## D-BLOCK REQUIREMENT STARTING IN 2023-24:

9TH AND 10TH GRADE: 3 seasons yearly, at least two of which must be
 team experiences.

11TH AND 12TH GRADE: If Co-Curriculum internship is during the school year, no D block requirement during the season in which the internship falls, with a few exceptions (Riding for horse owners, Dance for Dance Select dancers. Please note in course descriptions). Of the remaining 2 seasons required, at least 1 must be movement related. If Co-Curriculum internship is not during the academic year, 3 seasons yearly, at least two of which must be team experiences. Movement D blocks include a D block where the student is physically participating in an endurance based non-stationary activity.

## AP Information

Since AP courses are designed toward this culminating assessment, and since some colleges award credit or consider scores for course placement, the School encourages students to take the exam. Students who choose to do so must follow all ordering deadlines set by the College Board and Academic Office. Students who order an exam but then cancel will be responsible for the accompanying fees from the College Board. Students are expected to attend all classes before and after their AP exams each day. They may be granted an extension to take tests, quizzes, and other assessments in those classes on the day of an AP exam. Teachers have the option of changing course deadlines to accommodate students taking multiple AP exams.

If a student chooses to register for a non-Madeira AP exam, they must contact the Academic Office before the deadline to receive the registration code. Students will be charged home. If the student adds the exam after the deadline, they will be charged a late fee in addition to the exam fee. If the student cancels after the deadline, the student will be charged a cancellation fee in addition to the exam fee.


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Course Information

## Core Courses

| $A P T$ |  |  |  |
| :---: | :---: | :---: | :---: |
| 9TH GRADE | 10TH GRADE | 11 TH GRADE | 12TH GRADE |
| Studio Art: Drawing | Studio Art: Drawing | Studio Art: Drawing | Studio Art: Drawing |
| Studio Art: Painting | Studio Art: Painting | Studio Art: Painting | Studio Art: Painting |
| Studio Art: Print Making | Studio Art: Print Making | Studio Art: Print Making | Studio Art: Print Making |
| Studio Art: 3D Design | Studio Art: 3D Design | Studio Art: 3D Design | Studio Art: 3D Design |
| Studio Art: Ceramics | Studio Art: Ceramics | Studio Art: Ceramics | Studio Art: Ceramics |
| Studio Art: <br> Fibers \& Fashion | Studio Art: <br> Fibers \& Fashion | Studio Art: <br> Fibers \& Fashion | Studio Art: <br> Fibers \& Fashion |
| Digital Art: Digital Drawing \& Animation | Digital Art: Digital Drawing \& Animation | Digital Art: Digital Drawing \& Animation | Digital Art: Digital Drawing \& Animation |
| Advanced Studio Art: Art Mediums Exploration | Advanced Studio Art: Art Mediums Exploration | Advanced Studio Art: Art Mediums Exploration | Advanced Studio Art: Art Mediums Exploration |
| Programming for the Visual Arts | Programming for the Visual Arts | Programming for the Visual Arts | Programming for the Visual Arts |
| Photography: Darkroom | Photography: Darkroom | Photography: Darkroom | Photography: Darkroom |
| Photography: Digital | Photography: Digital | Photography: Digital | Photography: Digital |
| Photography: <br> Alternative Process | Photography: <br> Alternative Process | Photography: <br> Alternative Process | Photography: <br> Alternative Process |
| Acting I: Acting Skills | Acting I: Acting Skills | Acting I: Acting Skills | Acting I: Acting Skills |
| Acting II: Acting Styles | Acting II: Acting Styles | Acting II: Acting Styles | Acting II: Acting Styles |
| Theater Skills: The Actor's Toolbag | Theater Skills: The Actor's Toolbag | Theater Skills: The Actor's Toolbag | Theater Skills: The Actor's Toolbag |
| Physical Theater | Physical Theater | Physical Theater | Physical Theater |
| Audition Techniques | Audition Techniques | Audition Techniques | Audition Techniques |
| Public Speaking | Public Speaking | Public Speaking | Public Speaking |

## ENGLISH




| interdisciplinary |  |  |  |
| :---: | :---: | :---: | :---: |
| 9TH GRADE | 10TH GRADE | 11 TH GRADE | 12TH GRADE |
| Student Life | Introduction to Horsemanship | Introduction to Horsemanship | Introduction to Horsemanship |
| STEAM Fundamentals | Mindfulness \& The Brain | Mindfulness \& The Brain | Mindfulness \& The Brain |
| Mindfulness and The Brain | Engineering for Robotics | Engineering for Robotics | Engineering for Robotics |
| Engineering for Robotics |  |  |  |


| SCIENCE |  |  |  |
| :---: | :---: | :---: | :---: |
| 9TH GRADE | 10TH GRADE | 11 TH GRADE | 12TH GRADE |
| Biology | Applied Chemistry | Applied Chemistry | AP Biology |
| Programming for Robotics | Chemistry | Chemistry | AP Chemistry |
| Forensic Science | Applied Physics | Applied Physics | AP Physics C: Mechanics |
| Environmental Science | Physics | Physics | Environmental Science |
|  | Programming for Robotics | AP Physics C: Mechanics | Forensic Science |
|  | Kinesiology: Functional Human Movement | AP Chemistry | Programming for Robotics |
|  | Marine Environmental Issues | Programming for Robotics | Kinesiology: Functional Human Movement |
|  | Forensic Science | Kinesiology: Functional Human Movement | Marine Environmental Issues |
|  |  | Marine Environmental Issues |  |


| WORLD LANGUAGE |  |  |  |
| :---: | :---: | :---: | :---: |
| 9TH GRADE | 10TH GRADE | 11 TH GRADE | 12TH GRADE |
| French I | French I | French I | French I |
| French II | French II | French II | French II |
| French III | French III | French III | French III |
| Latin I | Latin I | French IV (Theatre \& Cinema) | French IV (Theatre \& Cinema) |
| Latin II | Latin II | AP French <br> Language \& Culture | AP French Language \& Culture |
| Classical Mythology \& Etymology | Latin III | Latin I | Latin I |
| Ancient Medicine \& Medical Terminology | Classical Mythology \& Etymology | Latin II | Latin II |
| Spanish I | Ancient Medicine \& Medical Terminology | Latin III | Latin III |
| Spanish II | Spanish I | Latin IV / AP Latin | Latin IV / AP Latin |
| Spanish III | Spanish II Spanish III | Classical Mythology \& Etymology | Classical Mythology \& Etymology |
|  |  | Ancient Medicine \& Medical Terminology | Ancient Medicine \& Medical Terminology |
|  |  | Spanish I | Spanish I |
|  |  | Spanish II | Spanish II |
|  |  | Spanish III | Spanish III |
|  |  | Spanish IV | Spanish IV |
|  |  | AP Spanish Language \& Culture | AP Spanish Language \& Culture |
| For more information regarding Madeira's academics, please contact the Academic Office by telephone at 703.556.8254 or by email at academicoffice@madeira.org. |  |  |  |

## Course Descriptions

## ART DEPARTMENT

## ART GRADUATION REQUIREMENTS: 3 CREDITS

Mission: Madeira Arts prepares students for their ever-evolving world by fostering self-expression, collaboration, advocacy, and resilience.
FOUR TIERS OF VISUAL ARTS COURSES ARE OFFERED

## Tier 1 Studio Art Courses:

## STUDIO ART: DRAWING

1-block course; Open to grades 9-12
Drawing is the foundation course for students interested in visual arts and eager to expand their creative abilities. Students will be instructed in the use of the design elements and principles through projects such as mark making, perspective drawing, and stilllife composition.

Prerequisites: None

## STUDIO ART: 3D DESIGN

1-3 block course; Open to grades 9-12
3D Design is a course for students eager to advance their understanding of 3-dimensional art across a variety of media. Students will use various materials and techniques such as ceramic handbuilding, carving, modeling, fibers, textiles, and armature building to create 3-dimensional works of art.

Prerequisites: None

## PROGRAMMING FOR THE VISUAL ARTS

1-block course; Open to grades 9-12
An introduction course to computer programming within the context of the visual arts. Utilizing the processing language, students will learn basic coding techniques, explore the fundamentals of computer graphics and create interactive drawing programs.

## Prerequisites: None

This course satisfies the Coding and Interdisciplinary requirement.

## Tier 2 Studio Art Courses:

## STUDIO ART: PAINTING

1-3 block course; Open to grades 9-12
Painting is for students who are eager to advance their painting skills and develop greater understanding of selected painting styles and mediums. Students will learn to create using acrylics, watercolors, guache, and mixed media.

Prerequisites: Studio Art: Drawing

## STUDIO ART: PRINTMAKING

1-3 block course; Open to grades 9-12
Printmaking is a course intended for students who are interested in advancing their understanding of the elements and principles of design through the medium of printmaking. Students will work with a wide range of materials and processes such as block printing, linoleum cut, drypoint, silkscreen, and relief printing.

Prerequisites: Studio Art: Drawing

DIGITAL ART: DIGITAL DRAWING AND ANIMATION 1-3 block course; Open to grades 9-12

Digital Drawing is for students interested in developing skills using digital media for artistic creation. Students will learn current software (Adobe Design Suite) used in creating visual art and animation. Projects will be student centered, with real world applications.

Prerequisites: Studio Art: Drawing

## DIGITAL ART: 3D MODELING

1-3 block course; Open to grades 9-12
3D modeling is a course for students eager to advance their understanding of the intersection of technology and 3 -dimensional art. Students will use various 3D modeling software such as TinkerCad, Fusion360, Meshmixer, and more to create 3D printed works of art.

## Prerequisites: Studio Art: Drawing

Only offered on even year ('24-'25, '26-'27)
Meets Interdisciplinary credit and Art credit

## STUDIO ART: FIBERS AND FASHION

1-block course; Open to grades 9-12
The focus of this class is around creating a fashion collection from start to finish. In this class students will use multiple art mediums such collaging, color theory, textile making, repeat pattern and fashion rendering to create a fashion collection. Students will create a mood board, color plates, fabric designs, fashion renderings and a final portfolio.

Prerequisites: 3D Design or Drawing
Meets Interdisciplinary credit and Art credit

## STUDIO ART: CERAMICS

1-block course; Open to grades 9-12
This course will introduce students to building and exploring clay, the basic techniques involved in ceramic construction, and the chemistry involved in the firing process. Various glaze and decoration techniques for finishing work will also be introduced. Emphasis will be placed on the design elements; line, shape, texture, form, and color. Focus will be on the hand building techniques; pinch, coil and slabs. Functional as well as sculptural applications based on form will be also explored.

Prerequisites: 3D Design

## Tier 3 Studio Art Courses:

## ADVANCED STUDIO ART: STUDIO EXPLORATIONS

## 1-block course; Open to grades 9-12

Art Media Explorations is an advanced studio course that allows students to explore a variety of media including drawing, painting, ceramics, sculpture, digital drawing, and more. Students will begin with daily mini workshops in each of the different mediums before focusing on thematic projects in a chosen area of study. Students will gain experience in research and artistic practice development. This course is ideal for the student looking to pursue Studio Art Seminar in a future year or who is interested in furthering technical skills in a particular area of studio art.

## Prerequisites: 2 mods of Studio Art Courses

## Tier 4 Studio Art Courses:

## STUDIO ART SEMINAR

3-block course; Open to grades 10, 11 and 12
In this advanced level course, students work towards developing mastery in: problem-solving skills; the elements and principals of 2-D or 3-D design; specific art mediums; art techniques; and related content. This course encourages and expects creative and systematic investigation of formal and conceptual issues in $2-\mathrm{D}$ and $3-\mathrm{D}$ design. Students will address the narrative voice in and of creating artworks. All art created will be assembled into a portfolio (hard bound and online) for college submission applications.
Prerequisites: At least three blocks of Studio Art classes (Drawing, Painting, Sculpture, or Ceramic Studio)

## Tier 1 Photography Courses:

## PHOTOGRAPHY: DARKROOM

1-block course; Open to grades 9-12
Students will learn how to use and control a schoolsupplied 35 mm SLR film camera, develop negatives, create contact sheets and print photographs. In the process, they will learn how cameras work as well as the fundamentals of composition.

Prerequisites: None
Meets Interdisciplinary credit and Art credit

## PHOTOGRAPHY: DIGITAL

1-block course; Open to grades 9-12
Students will further their photography skills by learning how to use their own 35 mm SLR digital camera (see special note). The course includes an overview of shooting modes and how these relate to the manual exposure settings learned in Photography: Darkroom. A variety of photo editing skills and the use of Photoshop will be explored, in addition to color printing and beginning portfolio development.

## Prerequisites: None

Special notes: Students must supply their own digital camera or cell phone with high quality functional camera.

## Tier 2 Photography Courses:

## PHOTOGRAPHY: ALTERNATIVE PROCESSES

1-block course; Open to grades 9-12
This course introduces students to the fundamentals of non-silver alternative photographic processes with emphasis on technical skills, and critique of photographic work. Among the processes studied: Cyanotype, Salted paper printing, Van Dyke Hand coloring, and Platinum Palladium. Students will learn skills related to safe chemistry usage, scanning, Photoshop manipulation to create and print digital negatives, paper coating and contact printing techniques.

Prerequisites: Darkroom or Digital Photography Only offered on odd years ('23-'24, '25-'26) Meets Interdisciplinary credit and Art credit


## Tier 1 Theatre Courses:

## ACTING I: ACTING SKILLS

1-block course; Open to grades 9-12
Students will learn techniques and develop acting skills through ensemble work, monologues, scene work, and a mock audition experience. In this class students will focus on script analysis, character development, and voice and body awareness.

Prerequisites: None

## ACTING II: ACTING STYLES <br> 1-block course; Open to grades 9-12

Building on skills learned in Acting I, students will explore various theatrical styles including Shakespeare, Restoration, and farce. Through warm-ups, voice and movement exercises, script analysis, and monologue and scene work, actors will apply acting techniques to each style.

Prerequisites: Acting 1, participation in a theatre D block, or permission of the instructor

## PUBLIC SPEAKING

1-block course; Open to grades 9-12
From casual announcements to formal presentations, we are tasked with public speaking daily. Students will learn techniques for harnessing their authentic presentation style to engage an audience including projection, articulation, body language, vocal tone, and eye contact. Focusing on the link between public speaking and storytelling, the class will culminate in students giving a speech in the Ignite style.

## Prerequisites: None

Meets Interdisciplinary credit and Art credit

## THEATER SKILLS: THE ACTOR'S TOOLBAG

1-block course; Open to grades 9-12
This class is for anyone who wants to become a wellrounded performer. Each week students will train in a specific skill to add to their actor's toolbag including improv, movement, text analysis, on-camera acting skills, and the business aspects of theatre.

Prerequisites: None

## PHYSICAL THEATRE

1-block course; Open to grades 9-12
In this class, students will collaborate to devise original pieces of movement-based theatre using various source materials. Examples are open scenes, fables, news stories, books, music, themes, and original concepts. Students will learn movement approaches like viewpoints, laban, and more to develop full body awareness and kinesthetic connections to their fellow artists in the process of building each piece.

## Prerequisites: None

## AUDITION TECHNIQUES

1-block course; Open to grades 9-12
Whether you are a professional actor, someone at a job interview, or a student prepping for college interviews, the skill of walking into a new space and making it your own will serve you well. In this class students will learn through observation and repetition the many skills necessary to have a successful audition experience.

## Prerequisites: None

## Evening Classes:

## STAGECRAFT

Open to grades 9-12 Mods 1 through 6 on
Wednesdays, 6:30-9:00 pm
Additional hours required for play and musical set builds and tech weeks.

Stagecraft is a year-long, hands-on course in technical theatre and production design. Students will have the opportunity to learn scenic construction, scenic painting, properties and costume construction, lighting and sound engineering principles, technical drawing, and the production design process for theatre. Students will experience a variety of projects from sketches to building to deconstruction and along the way will learn to solve problems in creative and collaborative ways. Earns three academic credits. Course may be repeated. Enrollment is limited to 25 students.

## Prerequisites: None

Meets Interdisciplinary credit and Art credits

## MADEIRA CHORUS

Open to grades 9-12 Mods 1 through 6 on Mondays and Thursdays, 6:30-8 pm

This large vocal ensemble class provides both beginner and advanced singers the opportunity to develop their choral and solo singing in a group experience, exploring a broad repertoire of music-from classical to contemporary, both accompanied and a cappella. Students prepare for two-to-three concerts and/or festivals per year. Students will also develop new or build upon existing music theory, ear training, and sight singing skills. Students must participate in all dress rehearsals and performances. Earns three academic credits. Course may be repeated.

Prerequisites: None

## CHAMBER ORCHESTRA

Open to grades 9-12 Chamber Orchestra: Mods 1 through 6 on Tuesdays and Thursdays, 6:30-8:30 pm Chamber Orchestra is open to all instrumental musicians including but not limited to strings, winds, brass, percussion, piano, and traditional instruments. The group prepares both large and small ensembles for four to six concerts per year while exploring and learning a wide range of musical styles, idioms, and historical contexts. Required in class rehearsal time is not to exceed two hours most weeks. Students must participate in all dress rehearsals and performances. Earns three academic credits. Course may be repeated.

Prerequisites: None

## Additional Opportunities

## TECH EVENTS CREW

Yearlong non-D Block activity; Open to grades 9-12
This is a hands-on introduction to basic theatre technology focusing on stage crew and booth operations. Students of every level gain a working knowledge of theatre terminology and handle all operations involved in running special events and All School Meetings throughout the school year. In addition to crew/booth responsibilities, students will learn specialized carpentry, painting, lighting, and sound skills through monthly workshops and seminars. Includes teaching workshops and staffing events.

## CO-CURRICULUM

## CO-CURRICULUM GRADUATION REQUIREMENTS: SOPHMORE CO-CURRICULUM, JUNIOR CO-CURRICULUM, SENIOR CO-CURRICULUM

Co-Curriculum is an essential part of Madeira's mission of launching women who will change the world. Co-Curriculum is a graduation requirement: 10th graders are required to complete the Serving Others Placement, the 11th graders are required to complete the Effecting a Change Placement, and the 12th graders are required to complete the Pursuing a Passion Placement. Madeira's Co-Curriculum Program provides opportunities for progressive degrees of independence and is designed to respond to the needs of students at each level of their development.

The Co-Curriculum Office works individually with students helping them identify their skills, interests, and passions, while also collaborating with them to identify appropriate placements where they will challenge themselves and grow as independent young women. In addition to providing logistical support, the Co-Curriculum Office oversees a curriculum designed to help students reflect upon their experiences and individual growth. Students are assessed on various assignments, projects, and a capstone experience, and receive a letter grade based on these assessments.

## SOPHOMORE CO-CURRICULUM/

## SERVING OTHERS

## 1 Mod, Required for 10th Graders

Service is one of the pillars of Madeira's founding and is the foundation for sophomore Co-Curriculum. Students will explore their connection to their local community and the concepts of social responsibility and civic engagement by volunteering in the local community. For each placement, students are divided into teams and given the task to identify the needs of those they serve and consider ways they might support the community. One day a week, students participate in Learning to Serve Discussions and Guided Team Meetings, as well as Calleva, the outdoor leadership program on Madeira's campus, to build their team skills.

The sophomore Co-Curriculum program helps students examine four essential questions
What is our responsibility to others?
How do we best serve others?
How do we develop the character and skills needed to serve others as individuals and as a team?

How do we develop the character and skills needed to serve others as individuals and as a team?

These questions build upon the work students do in their 10th grade Comparative Global Studies II classes and their Co-Curriculum experiences inform some of the work they will do for their research paper in Comparative Global Studies II.

Students are assessed on their ability to work as a member of a team, think creatively about local community challenges, demonstrate an understanding of those they serve, develop workable solutions, and persuasively present their ideas.

JUNIOR CO-CURRICULUM/
EFFECTING A CHANGE
1 Mod, Required for 11th Graders
Junior Co-Curriculum and the U.S. History course are an integrated program. In their U.S. History courses, students will develop knowledge and practice skills that will help them in their internship on Capitol Hill. During the internship, students will have hands-on experience that will inform their final research project for U.S. History.

In the first part of the U.S. History course, called the American Revolution and the Constitution, students will develop a working knowledge of how the U.S. government functions and what role Capitol Hill plays. Before students go to Capitol Hill, they will complete the PREP mod which is one of their four U.S. History mods. During the PREP mod, students will work with their history teacher to practice the oral and written skills, awareness of current events, and the research skills necessary to work in a Congressional Office. Students also will identify a national policy issue that is important to them.

During their Congressional internship, students will submit a variety of assignments to the Co-Curriculum Office that will help them reflect upon their experience and their national policy issue. This policy issue will be the focus of their Co-Curriculum capstone project, the research-based culmination of their internship experience, as well as the final research project in U.S. History. In addition to their daily duties as Congressional interns, the Co-Curriculum Capstone project gives students the opportunity to apply skills learned in the classroomquantitative and analytical reasoning skills, oral and written communication skills, and research and tech skills-to effect change.

## SENIOR CO-CURRICULUM/

## PURSUING A PASSION OR CURIOSITY

1 Mod, Required for 12th Graders
The Senior Co-Curriculum experience, by allowing students to participate with an internship of their choosing, provides an opportunity to pursue a passion or area of interest and to check their ideal vision against reality. Throughout their internships, students will submit reflections and various research assignments based on their experiences. Students will also be paired with a mentor, who will help them reflect on their experience. Students will be challenged to investigate the internship's industry or field of study, focusing on the trends and issues facing the field and the opportunities that exist within it as a career path. Additionally, students consider the ways that they might be a leader in the field or industry, reflecting on how their placement site is meeting its goals and thinking of the ways it might improve.

Seniors are eligible to apply for a Global Placement outside of the immediate Washington, DC area. A separate application is required for a Global Placement. Rising seniors are eligible to apply for an internship the summer between their junior and senior year. A separate application and approval required for a Summer Placement.


## ENGLISH DEPARTMENT

## GRADUATION REQUIREMENTS: 12 CREDITS (3 CREDITS PER YEAR)

The four required years of English instruction constitute a cumulative program that immerses students in the diversity of literature in English and encourages them to make connections across the curriculum. All students study Shakespeare and benefit from field trips to the Shakespeare Theatre in Washington, D.C.

The English program helps students become thoughtful, lifelong readers, hones their analytical abilities, and trains them to write fluently and creatively. In all English courses, students learn how to develop logical arguments and use a rich and precise vocabulary. The English Department uses the study of literature to lead each student to a greater sense of self, community, and the world.

## English I

3-block course; Open to grade 9
During the first year of required English, students are introduced to fundamental texts from widely different cultures and time periods in order to shape and explore questions essential to the study of literature in English.
To build multidisciplinary literacy, English I also tasks students with learning how the arts and sociohistorical contexts inform their texts. Students learn the process of crafting expository writing, moving from invention strategies to revision. Throughout the year, vocabulary building and grammar work help lay a foundation for clear, effective writing.

Prerequisites: None


## Modules:

## INTRODUCTION TO LITERARY STUDIES

The focus of this section is on discovering critical approaches to literature, practicing MLA style conventions in analytical responses, honing close reading and annotation skills, and exploring grammar concepts important to the production of highquality written work. Students will read small-form prose (short stories, micro-memoir, etc.), poetry from a variety of authors and time periods, and one play by William Shakespeare. They will shape and challenge their interpretations of these varied texts through performance exercises and the exploration of how writers use their chosen forms in unique ways to communicate rich stories of self-discovery and social commentary. Students will also begin writing small pieces of literary criticism and creative work in response to their readings. This section culminates with a student-directed and studentacted performance of the play and a collaborative "Production Folio" of character analyses, production design elements, and a dramaturgical essay.

## NARRATIVE AND ARGUMENTATION

In this course, students will read several complex texts and observe how the form and background of each work reveal strategies for their interpretation. They will use critical essays on the works as models for their own responses at the end of the course. Students can expect to read longer works like Homer's Odyssey, Richard Adams's Watership Down, or Mohsin Hamid's Exit West alongside N. Scott Momaday's ancestral stories in The Way to Rainy Mountain in order to understand how each text explores the physical and spiritual journeys of our core selves. Students will focus on building strong arguments and supporting them with rich textual support in a series of small responses before crafting a full-length, critical essay.

Prerequisites: Introduction to Literary Studies

## PORTFOLIO

This is the culminating section of the English I course of study. Students will bring the skills and knowledge they gained (as well as several pieces of writing) from the previous two sections of English I to bear on the creation of a portfolio of critical and creative work that focuses on comparison/juxtaposition, adaptation, and research in literary criticism. Texts for this section may include With the Fire on High by Elizabeth Acevedo, Haroun and the Sea of Stories by Salman Rushdie, and All Systems Red by Martha Wells, among others.

Prerequisites: Introduction to Literary Studies and


MADE at MADEIRA

## WRITING WITH STYLE ABOUT GLOBAL LITERATURE

Students who test out of Writing Mechanics cultivate their prose style in this workshop-style course where they read and respond to each other's writing, in addition to receiving feedback from their teacher. Reading Chimamanda Ngozi Adichie's Purple Hibiscus (summer text) short stories will provide contemporary cultural topics for student writing. These students conduct biographical research on individual authors.

Can substitute for Writing Mechanics and Global Literature-required

## LITERARY MASTERPIECES: JANE EYRE

Students will study Charlotte Brontë's novel Jane Eyre. Close reading of the text, vocabulary building, and learning about the social history of Britain will enhance students' understanding of this work. Students will demonstrate their understanding primarily through analytical essays.

Prerequisite: Writing Mechanics and Global Literature

## LITERARY MASTERPIECES:

 SATIRE IN CHAUCER AND AUSTENStudents will study the social satire of Chaucer's Canterbury Tales and Austen's Pride and Prejudice. Close reading of the texts, vocabulary building, and researching social history will enhance students' understanding of these two works and the function of satire. Students will demonstrate their understanding primarily through analytical essays.

Prerequisite: Writing Mechanics and Global Literature

## LITERARY MASTERPIECES: POETRY

Students will read works by John Keats and Elizabeth Barrett Browning, two prominent 19th-century English poets. Students will learn strategies for discovering meaning in the selected poems through close attention to literary devices and through the viewing of two feature films, Bright Star (2009) and The Barretts of Wimpole Street (1934), that dramatize these two poets' famous life stories. Students will demonstrate their understanding through expressive recitation and analytical essays.

Prerequisite: Writing Mechanics and Global Literature


## English III

## AMERICAN LITERATURE

3-block course; Open to grade 11, though seniors may take 1 block as an English IV choice.

English III offers a thematic approach to American Literature, introducing students to a variety of texts from major literary movements and historical periods. In both their writing and in-class discussions, students practice close textual analysis that develops increased skill in the interpretation of literary techniques and rhetorical strategies. Students conduct research on American authors and poets to synthesize literary criticism with their own original arguments. Some students may choose to take the AP English Language and Composition exam in May of their junior year.

## Prerequisites: English I \& English II

## Modules:

## THE RHETORIC OF EQUALITY

(Required): Students will read and analyze Frederick Douglass' Narrative of the Life of Frederick Douglass (summer text), Ralph Ellison's The Invisible Man, and essays and speeches representing a range of voices in the struggle of civil rights in the United States. Along with close study of language and narrative techniques in the text themselves, students will learn their historical contexts by studying related literature and art. Students will explore the conversations these works have engendered through analysis, synthesis, and argumentative writing. Students will learn how to defend an argument and use rhetorical devices in academic writing.

Prerequisite: Any two of the modules below

## FEMINIST PERSPECTIVES

This course will focus on fiction that depicts the changing role of women spanning the seventeenth to the mid-twentieth century. It will explore the obstacles, both internal and external, women faced in defining their own lives. Students will read Nathaniel Hawthorne's The Scarlet Letter, Toni Morrison's Sula, and selected short stories. Since the American Gothic tradition is a common element among these texts, students will explore how it arose navigate and challenge social limitations. Students will also learn how to integrate literary criticism into their writing as part of a larger research paper.

## AMERICAN MODERNISM

In this module, students will examine how Modernist writers questioned or outright denied assurances provided by religion, politics, social norms, and traditional forms of art. The course will also examine how these writers processed World Wars I and II. Texts include poetry of the Harlem Renaissance, F. Scott Fitzgerald's The Great Gatsby, and Kate Chopin's The Awakening. Students will also learn how to integrate literary criticism into their writing, as part of a larger research paper.

## THE LITERARY MEMOIR

Students will interrogate the American experience through the lenses of memoir and personal essay. Texts include Isabel Allende's Paula along with contributions from writers like Leslie Marmon Silko, Maxine Hong Kingston, Joan Didion, Jhumpa Lahiri, Jamaica Kincaid, and James Baldwin. Students will learn to write analytically and creatively about identity formation from a multicultural perspective. In addition to analytical writing, students will develop a creative nonfiction essay that parlays into their college application essay process.

## English IV

3-block course; Open to grade 12
During the fourth year of required English, all students take three modules drawn from a broad range of offerings, including AP English Literature and Composition. Building upon the close, scholarly relationships with their peers and teachers during prior study, students flex and advance their skills in critical thinking and analytical and creative writing. Prerequisites: English I, English II, and English III. Based on enrollment, we will offer some combination of the following classes in the 2022-2023 academic year.

Students may take one English III module to satisfy this requirement-excluding The Rhetoric of Equality

## Modules:

## EXPATRIATES IN PARIS

Paris in the early twentieth century was a center of literary and artistic innovation, drawing many Americans and other foreigners who delighted in the beautiful surroundings and the creative environment. This course focuses on writers, painters, dancers, and musicians, many of whom we now call "modernist." We begin with Hollywood's dreamy version of this world depicted in the 1951 film An American in Paris. We then compare the romanticized versions of expatriate writers' work to the reality by reading Ernest Hemingway's The Sun Also Rises, Gertrude Stein's The Autobiography of Alice B. Toklas, and other short selections. Through documentary films, art images, and music recordings, we explore the works of Picasso, George Gershwin, Aaron Copland, Josephine Baker, and Diaghilev's Ballets Russes. We conclude by studying the influence of the Parisian avantgarde on Thornton Wilder's classic American play, Our Town.

## GETTING MEDIEVAL

In this module we will look closely at how medieval life has been constructed in various literary modes: romance, epic, and historiography. We will consider the social and historical contexts of life in the Middle Ages and examine how medievalism continues to influence artistic production. Our means of investigation will be diverse: close reading, lively discussion, study of history and art, and creative and analytical writing. This course will challenge the student to develop an even richer, more precise vocabulary, and to stretch and synthesize the student's knowledge of history, religion, art, and philosophy.

## A DOGGONE SHAME: HEARTSTRINGS/PUPPETSTRINGS

This course explores the use of animal narratives by writers to comment on social justice initiatives in the public sphere. Broadly, the goal is to explore how we use animal stories to access emotional investment and clarify the stakes at the individual level of these movements. Using a novel such as Richard Adams' The Plague Dogs as our central case study, students will hone the skills they have been building over their high school career to dive deeper into how and to what effect popular media, journalism, gossip and other forms of public discourse are worked on by narrative and the written word.

## THE SHAPES OF STORIES

Many anthropologists study the forms of clay pots, war helmets, or bones, but what about the shapes of stories? In this course, students will read Kurt Vonnegut's Slaughterhouse Five and Mother Night and explore the ways Vonnegut's anthropological research influenced his fiction and accounts for how he worked against traditional plot forms. Students will conduct research on Vonnegut and narrative theory, exercise their skill in composing literary analysis, and write creatively to experiment with the shapes of their own stories.

## MOTHER, MAY I?

People have always told stories in order to explain or make sense of the world around them. Science, in some way, has often sought to prove or disprove those same stories. In Mary Shelley's Frankenstein, the collision between the stories we tell ourselves about the mystery of life and the science behind its creation is both sublime and terrifying. This course will approach one of the most famous horror stories of all time from a literary, psychological, and scientific perspective. Students will also consider the influence of Shelley's cadre of literary friends and family on her own work. Throughout, students will hone their research, analytical, and creative writing skills. Texts include Mary Shelley's Frankenstein and selections from Mary Wollstonecraft's A Vindication of the Rights of Woman. Students will also explore the work of William Blake, Percy Bysshe Shelley, Samuel Taylor Coleridge, Anna Laetitia Barbauld, and George Gordon, Lord Byron.

## POETRY WRITING WORKSHOP

This course is structured as a workshop and focuses on poetry created by the class. Students will write a variety of poems-from formal sonnets and villanelles to pantoums and free verse poems-and participate in regular discussion of each other's work. Based on feedback from the class and teacher, and their own expanding expertise, they will then revise their work and compile it in a final portfolio. Students will also read and analyze a diverse selection of poems to broaden their knowledge and understanding of the vast array of poetic voices that exist throughout the world and across time. As a culmination of the course, students will have the opportunity to share their poetry with the Madeira community.

## AP ENGLISH LITERATURE AND COMPOSITION 2-block course; Open to grade 12

This course offers students an introductory col-lege-level curriculum and prepares them to take the AP English Literature exam in May. Students develop their skills in critical thinking, analytical writing, and close reading through daily discussion, diverse writing assignments, and AP exam practice. Texts will be drawn from a range of genres, including poetry, fiction and drama, and will represent major artistic statements of the periods ranging from the Renaissance to the Twentieth Century. For the third block of senior English, AP students will be enrolled in an English IV elective.

Prerequisite: Department approval


## International Student English

## YEAR ONE (ISE 1)

3-block course; Open to grades 9 and 10
This class is required for all first-year students in the International Student English Program. The course helps students acclimate to The Madeira School and to academic standards and practices in the United States.

Students develop their familiarity with the tools available to them for their studies in English: dictionaries (bound and online), library reference and research databases, grammar resources, and course-management, word-processing, and presentation software. Throughout the course, students build their vocabulary and increase their oral communication skills through public speaking practice, interviews, group presentations, and frequent discussion of readings.

The course also offers intensive instruction in writing, with a special focus on learning the process of composing the expository essay. Students practice prewriting, thesis construction, paragraph development, drafting, and revision. Additionally, students are taught to apply U.S. conventions of language and grammar outside the expository essay, in email, letters, resumes, creative writing, and presentations.

## Prerequisite: None

Corequisite: ISE1 I: Introduction to Madeira Scholarship must be completed prior to taking English I courses.

## YEAR TWO (ISE 2)

3-block course; Open to grades 10 and 11
This class is required for all second-year ISE students. Year Two allows students more time and instructor attention to develop grade-appropriate English reading and writing skills across the Madeira curriculum. The course emphasizes the development of composition skills through writing exercises that hone the use of correct grammar and punctuation. Additionally, students explore ways to craft more substantive thesis statements and build cohesive arguments as they use examples from their texts, employ correct citations, and frame conclusions that are more discovery than mere summary. They work closely with the instructor in drafting, editing, and rewriting assignments. Throughout the course, students further improve their reading comprehension by practicing annotation techniques and identifying significant passages in their texts for discussion. In the third block, rigorous attention is paid to the development of public speaking skills. Each module has a different content focus, though reading, writing, speaking and listening skills are developed and honed in each module.

## Modules:

ISE2 I: Madeira's School Values
ISE2 II: Public Speaking
ISE2 III: Literary Analysis: A Masterwork in English

## Modules:

ISE1 I: Introduction to Madeira Scholarship
ISE1 II: Working with Literature
ISE1 III: Working with Research

## HISTORY DEPARTMENT

## GRADUATION REQUIREMENTS: 9 CREDITS AND 1 RESEARCH CREDIT IN JUNIOR YEAR

The Madeira History Department is committed to supporting the mission of the school in the materials we employ, the skills we help students practice, and the learning we support.

History classes will provide students with an understanding of the world through analysis of the past and discussions of the present. Students are asked to consider the interconnectedness between their lives, the lives of their communities, and the historical events we study. By exploring these connections, a student will develop both a strong sense of self and one's role in the world.

The History Department seeks to develop the essential skills of research, data analysis, writing, oral presentation, and critical thinking that will prepare each Madeira graduate to continue studies successfully at the college level. More importantly, the history curriculum prepares students to be compassionate, interested, and effective citizens in the world beyond Madeira and in our global community.

## COMPARATIVE GLOBAL STUDIES I

3-block course; Required for 9th graders
Comparative Global Studies I invites students to consider what it means to be a member of our global community. Students will explore their place in the world through a skills-intensive and multi-disciplinary regional studies curriculum. Course work will draw from the histories of Africa, Asia, Latin America, and the Middle East and will focus on regional interactions as well as the origins of cultural foundations. Students will be introduced to research, analytical writing, and source evaluation. This course is committed to global citizenship and excellence in the humanities, which asks students to think critically and independently and form a deeper awareness of self and others in the world.

Prerequisites: None

## COMPARATIVE GLOBAL STUDIES II <br> 3-block course; Required for 10th graders

Comparative Global Studies II continues the regional study of Africa, Asia, Latin America, and the Middle East through the lens of global politics, revolution, and human rights. Students will explore the historical patterns and political foundations that shape our world today in order to become confident, informed, and active participants in the 21st-century. Students will refine a repertoire of academic skills including critical reading, analytical writing, and source evaluation. The course concludes with a comparative research seminar, for which students will write an analytical paper based on their independent study and research.

Prerequisites: Comparative Global Studies I. New 10th graders: an equivalent 9th grade history course.

## U.S. History

## 4-block course; Required for 11th graders

Since a large part of understanding who we are and what we aspire to be requires an awareness of what has come before us, this course will provide the material to help Madeira students identify their place in the narrative of United States history. Students will continue to develop the skills established during their history coursework from 9th and 10th grade, including critical analysis of primary and secondary sources; oral expression in the form of classroom discussion, debates, and role playing in historical simulations; analysis and expression in essays and short answer questions; and in-depth historical research techniques. The first module will provide students with a working knowledge of how the U.S. government functions and what role Capitol Hill plays. One module will provide Juniors with the skills necessary to thrive in a congressional office, including oral and written skills, awareness of current events, and the research skills necessary for completing the Co-Curriculum Capstone Project.

## Prerequisite: Comparative Global Studies II.

New 11th graders: an equivalent 10th grade history course.

## Modules:

## AMERICAN REVOLUTION AND THE CONSTITUTION

Students will examine the causes of American independence and the formation of a new nation. In addition, students will learn the workings of the current U.S. government, with particular emphasis on the role of Congress. Students will also practice the writing and historical skills they learned in Comparative Global Studies II.

## THE EVOLUTION OF THE UNITED STATES' ROLE IN THE WORLD <br> Students will examine how the United States went from a small, isolationist nation to a major world power by looking at diplomacy and wars. The capstone project will focus on a current U.S. foreign policy question of the student's choice.

## Prerequisites: American Revolution and the Constitution

## CIVIL RIGHTS FOR ALL

Students will look at the development of the American slave system and its impact on American society. Students also will examine the causes of the Civil War and its impact. Finally, students will evaluate the efforts of women and other groups seeking equality in the United States. The capstone project will focus on a current women's rights question of the student's choice.

Prerequisites: American Revolution and the Constitution

## THE EMERGENCE OF THE UNITED STATES AS AN ECONOMIC POWER

Students trace the economic developments in the United States, including the First and Second Industrial Revolutions, the Great Depression, and the Affluent Society. The capstone project will focus on a current question of U.S. economic policy.

Prerequisites: American Revolution and the Constitution

## 12TH-GRADE HISTORY

Students who have completed U.S. History may enroll in one or more 12th grade elective. Students will automatically be enrolled in a History Research Seminar or History Research Capstone as part of the elective requirement. Based on enrollment, we will offer some combination of the following classes in the 2023-2024 academic year.

## Capstone Seminars

2-block course; Research Capstone;
Open to 12 th graders.

## GLOBAL JUSTICE

Explores the question "What do we owe to others in a world of difference?" Beginning with philosophies of justice from around the world, starting with pre-modern philosophers such as Aristotle, Mencius, and African ethicists. Moving to a study of 20th century philosophers such as John Rawls, Brooke Ackerly, and Audre Lorde. Ending the first Mod with an exploration of intersectional feminist philosophy from South Asia, East Asia, Central America, and Africa. Building on philosophies of justice and intersectional feminisms, we explore a case study where we apply theories of justice to a student-selected "hardest case of injustice." Central to our journey will be discussions of the following core concepts: philosophical concepts of duty, transnational feminisms, cultural identity, racism, global structures of power, and resistance. Students develop the skills to become confident, informed, and active participants in the 21st century and will read from a variety of college-level sources (in addition to art, poetry, and music). As a Capstone seminar, students can expect discussion and college-level workloads with emphasis on habits of "head, hand, and heart."
Prerequisites: U.S. History

## QUEER HISTORY

Queer theorist David Halperin argues that the histories of gender and sexuality are indivisible from the history of society. The 20th Century more than any other saw extremes in the persecution, recognition, and celebration, not necessarily in that order, of LGBTQ+ individuals in societies around the world. This course will focus on the 20th century because the 20th century offers more readily available records, more familiar language, and some structure. Queer History Seminar will introduce students to key concepts, players, locations, and objects in Queer history in both the United States and globally, to uncover those stories and theorize how best to commemorate them. As a capstone, students independently research an element of queer history of their choosing, writing both a paper and presenting their findings.


## MIDDLE EAST IN MODERN MEMORY

The Middle East in Modern Memory begins from a point of disagreement, namely localized intersectoral conflicts that arise due to global pressures. We will begin by outlining the major sociological points of conflict in west Asia in contemporary times and trace their points of disconnection and disruption to understand the region's beauty and complexity. Our work together will include in-depth exploration of the Israeli/Palestinian conflict, the Armenian Conflict with both Turkey and Azerbaijan, the Kurdish issue over statehood, and the Iranian conflict with the west. In each case students will seek to understand the complexities of the topic as well as how the tensions affect ordinary people and their identities. The Middle East in Modern Memory will provide a college-level introduction to the Modern Middle East while at the same time allowing students to explore the nature and evolution of personal, religious, gender, and cultural identity. Students can expect to read a variety of sources, watch films, and write expository essays. As a Capstone seminar, discussion and college-level workloads as well as exposure to thought leaders, peers from the region, and policy practitioners will be central to the course.

Prerequisites: U.S. History

# Research Seminars 

1-block course + Research Seminar<br>1-block course; Open to 12th graders

## AMERICAN GIRLHOOD

This seminar builds on two important premises. First, people consume history not only through classrooms and museums but also through commercialism and popular culture. Second, women's history, including children and girlhood, matters for understanding the past and how it shapes the present. This seminar critically analyzes how American Girl dolls offer empowerment and representation, as well as how they leave holes in representation. This seminar studies U.S. girlhood and American Girl dolls through the lenses of race and class. Assignments include listening to the American Girl podcast produced by two historians, reading excerpts from cutting-edge articles and scholarly monographs, and producing a combination of essays and projects. Ultimately, America Girl dolls and the limits of representation serve as an entry point into an advanced, applied, in-depth U.S. History akin to a college-level class.

## Prerequisites: U.S. History

## BIG IDEAS ON PHILOSOPHY

This seminar begins by exploring free will, freedom, and responsibility. What is freedom, and what does it have to do with responsibility? Next, we delve into topics relating to the self and others: the problem of self, the problem of others, consciousness, self-consciousness, double consciousness, absurdity, authenticity, and the limits of authenticity. Who am I, and what is the nature of my relationships with others? What is authenticity, and what are its limits?

Prerequisites: U.S. History

## CAPITALISM AND ITS CRITICS

Capitalism shapes our world and worldview so completely that it has become as omnipresent as air. This course explores the evolution of capitalism as an economic system and provides a chance to study historical critiques of capitalism from the "right" and the "left." As Robert Heilbroner (the author of the book we will read) stated: "If socialism failed, it
was for political, more than economic, reasons; and if capitalism is to succeed it will be because it finds the political will and means to tame its economic forces." Additionally, we will explore some of the major works of economic philosophy. Lastly, we will create a group project related to the intersection between capitalism and race, education, or climate change (class choice).

Prerequisites: U.S. History

## HOLOCAUST STUDIES

This seminar opens by tracing the origins of antisemitism. This seminar then delves into the Nazi rise to power in inter-war Germany. Students will explore how the Holocaust was a uniquely modern phenomenon that required a centralized state and twenti-eth-century technology. This seminar then teaches the horrors of the Holocaust through history, film, and literature. The Holocaust affected many people, and we center Jewish people in Nazi territory, and we center Jewish perspectives while also expanding beyond them through guest speakers and new scholarship. Never shying away from complexity, this seminar explores memory among survivors, their loved ones, descendants of survivors, and of course victims, as well as political uses of memory today. At its core this seminar never loses site of how we can prevent something like the Holocaust from reoccurring.

Prerequisites: U.S. History

## INDIGENOUS PEOPLES OF NORTHERN VIRGINIA

Madeira is situated on a beautiful campus that once supported a vibrant indigenous population along the Potomac River. In this course, students will explore the story of these people. By accessing the historical and cultural resources available throughout Northern Virginia, students will gain an understanding of the land and its connection to its first human inhabitants. The course will include activism toward social justice component by developing and proposing ways in which the Madeira community can become more involved in supporting the current indigenous populations in Northern Virginia.

Prerequisites: U.S. History

## Interdisciplinary Studies

GRADUATION REQUIREMENTS: Must complete Student Life and STEAM Fundamentals courses, one additional Interdisciplinary credit (for Class of 2024 and Class of 2025), one Coding credit.
The Interdisciplinary courses supports Madeira's mission to launch women who change the world by providing opportunities for students to develop the knowledge and skills to help them navigate and take charge of their lives in high school and beyond.

Interdisciplinary Studies classes are designed around Madeira's community values: awareness of self and others, compassion, creativity, intellectual curiosity, integrity, and resilience. The classes provide opportunities for student to discover and develop their individual and collective identities, learn how to make healthy choices and care for themselves and others, strengthen their ability to communicate effectively and advocate for themselves and others, increase their awareness and understanding of cultural and societal issues, and build their critical thinking and analytical skills. The classes are focused on inquiry-based learning.

STEAM classes teach students the knowledge, understanding and skills needed to engage in an iterative process of designing and making through a variety of creative, collaborative and practical activities. These courses include concepts and/or processes used in science, technology, engineering, arts, and mathematics.

## STUDENT LIFE

2-block course; Required of all ninth graders
The Student Life ninth grade curriculum focuses on knowledge and skills Madeira students will need as community members and into their future. We engage students in the examination of who they are as individuals, how they influence and are influenced by others, and how they can care for themselves and cultivate healthy and inclusive communities. Each student will develop and apply essential life skills as she builds a deeper understanding of herself and of those around her. Students will be assessed through experiential activities, inquiry-based projects, presentations, journal entries, papers, and class participation. This course is taught by faculty and staff members from various departments, giving students the opportunity to learn from community members not usually found in the classroom. These faculty and staff members bring their unique, professional perspectives to the curriculum.

Prerequisite: None

## INTRODUCTION TO HORSEMANSHIP

1-block course; Open to grades 9-12
This class is an introduction to horsemanship, designed for students who have had minimal or no previous experience with horses. Students will learn how to groom, lead, tack, mount/dismount, and will be introduced to the basic positions and controls used while riding a horse. Students will gain an understanding of how horses learn and be taught how to communicate with the horse effectively on the ground. In addition to the hands-on component of the class, students will discover how horses permeate most aspects of our culture and have the opportunity to research a topic of their choice. This course has a physical fitness requirement.
Course is limited to 8 students per section.
Meets Interdisciplinary credit

## MINDFULNESS AND THE BRAIN

1-block course; Open to grades 9-12
Mindfulness practice involves paying attention to the present moment in a specific and deliberate way without judgment. Research shows that mindfulness can have a profound impact on the way neurons fire in the brain and subsequently the way different regions in the brain, most notably the prefrontal cortex, communicate with each other. In other words, mindfulness practice can permanently influence how we think. Through examination of the work of Daniel Siegel, Jon Kabat-Zinn, and others, students will investigate the anatomy, functions, and interconnectedness of the brain, how the brain continues to change over the lifespan, and how mindfulness practice impacts the brain's functions and by extension, one's ability to make decisions, regulate emotions, and interact with others. This course will provide the opportunity to explore the basic tenets of mindfulness, experience different ways to focus attention and increase awareness, and develop her own unique daily mindfulness practice.

## Prerequisite: None

Meets Interdisciplinary credit

## STEAM DEPARTMENT

By using design, technology, and problem-solving techniques to investigate real-world issues, the STEAM program at Madeira will give students an opportunity to explore the interplay of science, mathematics and art to lead with innovation and vision. Students can choose from a variety of course and activities beginning with the required 9th grade course STEAM Fundamentals. Some STEAM courses may also satisfy art, computer science, math and science credits.

## STEAM FUNDAMENTALS

1-block course; Required for all 9th graders.
In this transdisciplinary, inquiry-based course, students will bring together science, technology, engineering, arts, and mathematics in the study of topics that might include: Sound, Kinetic Sculptures, Agricultural Design, and Paper Engineering. Students will gain knowledge of and employ the Elements and Principles of Design, the Design Engineering Process, tool usage, and technical drawing throughout their project work.

Prerequisites: None

## Topics in STEAM

1-block courses;
Open to grades 9-12

## Modules:

## COMPUTER SCIENCE I

1-block course; Open to grades 9-12
A first look at computer programming in Python. This course will take a project-based approach to developing essential programming skills. Students will write programs using variables, user interaction, basic data structures, conditional and logical control structures, functions, and other topics in modern Python programming. With this strong foundation, "Advanced Programming" courses are open to interested students following completion.

## Prerequisite: Algebra I

Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE II

1-block course: Open to grades 9-12
Building upon the topics from Computer Science I, Computer Science II takes a project-based approach to developing more advanced programming skills. In addition to the topics covered in Computer Science I, students will work with complex data structures, write programs that read from and write to external files, define classes for use in object-oriented programming, and explore other topics in modern Python programming.

Prerequisite: Computer Science 1 or Placement test, Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE III

## 1-block course: Open to grades 9-12

Building upon the topics from Computer Science I and II, Computer Science III students will learn how to design, implement, evaluate, and iterate on complex problems with Python. Topics covered include advanced data structures and algorithms, different programming paradigms, software development best practices, project management methodologies, and design thinking as they develop real world programming skills. Through hands-on projects and group work, students will apply their knowledge to create fully executable computer programs solving real-world problems.

Prerequisite: Computer Science 2 or Placement test Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE SEMINAR

1-block course: Open to grades 9-12
This culminating, student-directed and project-based computer science course combines all skills learned in Computer Science I, II, and III. Students will use programming skills and the design thinking process to identify real-world problems and create innovative solutions. By the end of this course students will have practical experience in developing real-world applications throughout all phases of the design cycle, from ideation to presentation and iteration.

## Prerequisite: Computer Science 3

Meets Interdisciplinary and Coding credit

## ENGINEERING FOR ROBOTICS

This inquiry-based course will explore the Science, Technology, Engineering and pure Mathematics that undergirds the field of Robotics. Throughout this hands-on course, students will learn and experiment with electrical wiring, mechanical design and, programming to design and prototype working robots. Students will learn through videos, in-class demonstrations, and hands-on practice. Students will use the principles they learn in this course to solve and prototype solutions to real-world problems.

## Prerequisites: None

Meets Interdisciplinary credit

## APPLIED MATHEMATICS: MATH IN MOTION

In this project-based course, students will bring together math, science, technology, arts and engineering, to design solutions to problems. The course builds upon the foundations STEAM Fundamentals and pushes students to connect their learning to topics in math and physics. Students will learn how the Design Cycle can be used to research, plan, test and engineer solutions. Skills from physics and math will be used to aid in design, predict outcomes, gather data, and test theories.

Prerequisites: Algebra II<br>Meets Interdisciplinary credit; Earns Math credit

## PROGRAMMING FOR ROBOTICS

1-block course; Open to grades 9-12
Students are immersed in incredible innovation in robotics and artificial intelligence. They learn the fundamentals of computer programming through the lens of robotics to solve real-world problems. This project-based course uses videos, in-class demonstrations and hands-on trial and error. Students learn and implement computational thinking, the engineering design process, and effective problem solving by coding robots with Arduino IDE (C/C++).

## Prerequisites: None

This course satisfies the Coding and Interdisciplinary requirement

## STAGECRAFT

Open to grades 9-12, Mods 1 through 6 on Wednesdays, 6:30-9:00 pm Additional hours required for play and musical set builds and tech weeks.

A year-long, hands-on course in technical theatre and production design-students will have the opportunity to learn scenic construction, scenic painting, properties and costume construction, lighting and sound engineering principles, technical drawing, and the production design process for theatre. Students experience a variety of projects from sketches to building to deconstruction and learn to solve problems in creative and collaborative ways. Earns three academic credits. Course may be repeated. Limited to 25 students.

Prerequisites: None
Meets Interdisciplinary credit and Art credit

STUDIO ART: FIBERS \& FASHION
1 block course; Open to grades 9-12
The focus of this class is around creating a fashion collection from start to finish. In this class students will use multiple art mediums such collaging, color theory, textile making, repeat pattern and fashion rendering to create a fashion collection. Students will create a mood board, color plates, fabric designs, fashion renderings and a final portfolio.

## Prerequisites: 3D Design OR Drawing

Meets Interdisciplinary credit and Art credit

## PROGRAMMING FOR THE VISUAL ARTS

1-block course; Open to grades 9-12
This course is an introduction to computer programming within the context of the visual arts. Utilizing the processing language, students will learn basic coding techniques, explore the fundamentals of computer graphics and create interactive drawing programs.

## Prerequisites: Studio Art: None

This course satisfies the Coding and
Interdisciplinary requirement

DIGITAL ART: 3D MODELING
1-3 block course; Open to grades 9-12
3D modeling is a course for students eager to advance their understanding of the intersection of technology and 3-dimensional art. Students will use various 3D modeling software such as TinkerCad, Fusion360, Meshmixer, and more to create 3D printed works of art.

Course is offered in alternating years, starting in ' 24 -' 25

Prerequisites: Studio Art: Drawing
Meets Interdisciplinary credit and Art credit

## PHOTOGRAPHY: DARKROOM

1-block course; Open to grades 9-12
Students will learn how to use and control a schoolsupplied 35 mm SLR film camera, develop negatives, create contact sheets and print photographs. In the process, they will learn how cameras work as well as the fundamentals of composition.
Prerequisites: None
Meets Interdisciplinary credit and Art credit

## PHOTOGRAPHY: ALTERNATIVE PROCESSES

1-block course; Open to grades 9-12
This course introduces students to the fundamentals of non-silver alternative photographic processes with emphasis on technical skills, and critique of photographic work. Among the processes studied: Cyanotype, Salted paper printing, Van Dyke Hand coloring, and Platinum Palladium. Students will learn skills related to safe chemistry usage, scanning, Photoshop manipulation to create and print digital negatives, paper coating and contact printing techniques.

Course is offered in alternating years, starting in '23-'24

Prerequisites: Darkroom or Digital Photography Meets Interdisciplinary credit and Art credit

## PUBLIC SPEAKING

1 block course; Open to grades 9-12
From casual announcements to formal presentations, we are tasked with public speaking daily. Students will learn techniques for harnessing their authentic presentation style to engage an audience including projection, articulation, body language, vocal tone, and eye contact. Focusing on the link between public speaking and storytelling, the class will culminate in students giving a speech in the Ignite style.

## Prerequisites: None

Meets Interdisciplinary credit and Art credit

## MATHEMATICS DEPARTMENT

## Course Progression 2023-2024

When students enter Madeira they take a placement test to determine their initial math class. Students are required to complete 12 blocks of mathematics, including one of Coding.

## COMPUTER SCIENCE COURSES:

- Computer Science I
- Computer Science II
- Computer Science III
- Computer Science Seminar

APPLIED MATH ELECTIVES:

- Financial Math (1-2 blocks)
- Math in Motion

STATISTIC ELECTIVES:

- Data and Display
- Probability
- Data Science


GEOMETRY
3 blocks

## NOTES:

- Algebra II includes a "Bridge to Algebra II" block, which is not required for all students
- Trigonometry is taken in conjunction with either Advanced Algebra II or Precalculus
- Differential Equations, Multivariable Calculus, and Linear Algebra are offered in alternating years.



## GRADUATION REQUIREMENTS: 12 CREDITS (INCLUDING ONE OF CODING)

The goal of the Math Department is to build mathematical thinking skills, to challenge each student to reach her full potential in mathematics, and to foster an ongoing interest in mathematical principles.

Students can choose from a variety of paths as they complete their twelve required blocks of math over a four-year period. Teachers and deans advise returning students on appropriate course selection; new students take math placement tests.

MATH PLACEMENT: New students take placement tests to determine enrollment in the appropriate math course. The Chair of the Math Department and the Academic Dean make all course placements.

## ALGEBRA I

3-block course; Open to grades 9-12
Students apply the basic concepts of arithmetic to the language of algebra and work with the structure and properties of the real number system. They learn to solve first- and second-degree equations, linear systems, and inequalities; they learn techniques of graphing and factoring; they work with polynomials, exponents, and radicals; and they set up and solve word problems. This course or its equivalent is a prerequisite for all subsequent courses in the department.

## Prerequisites: None

## GEOMETRY

3-block course; Open to grades 9-12
Students learn to identify angle relationships, scale, proportion, triangle congruence, and similarity, how perpendicular and parallel relationships unify and extend earlier concepts, and how to apply new knowledge to applications in circles, polygons, and right triangles. Students learn how to compute the area of plane figures and apply trigonometric skills to problem-solving in their work with a variety of 2-D shapes. Students will apply principles of algebra with continued practice and reinforcement while also demonstrating increasing flexibility with coordinate geometry, building a strong foundation for success in higher mathematics.

Prerequisites: Returning students-Algebra I;
New students-by placement test

## BRIDGE TO ALGEBRA II

1-block course; Open to grades 9-12
Students will review Algebra 1 topics including solving linear equations and inequalities, solving absolute value equations and inequalities, direct variation word problems, graphing linear functions, graphing absolute value equations, graphing piecewise functions, solving systems of linear equations.

Prerequisites: Returning students-Geometry B and below and/or Algebra I B and below; New students-by placement test

## ALGEBRA II

3-block course; Open to grades 9-12
This course extends the algebraic principles learned in Algebra I, including an exploration of different number systems such as radical and complex numbers. Students will study the algebraic and graphical properties of a wide variety of functions including quadratic, polynomial functions, radical, rational, trigonometric, exponential and logarithmic.
Prerequisites: Returning students-Bridge to Algebra II or Geometry B+ or higher;
New students-by placement test

## ALGEBRA I

3-block course; Open to grades 9-12
Students apply the basic concepts of arithmetic to the language of algebra and work with the structure and properties of the real number system. They learn to solve first- and second-degree equations, linear systems, and inequalities; they learn techniques of graphing and factoring; they work with polynomials, exponents, and radicals; and they set up and solve word problems. This course or its equivalent is a prerequisite for all subsequent courses in the department.

## Prerequisites: None

## GEOMETRY

3-block course; Open to grades 9-12
Students learn to identify angle relationships, scale, proportion, triangle congruence, and similarity, how perpendicular and parallel relationships unify and extend earlier concepts, and how to apply new knowledge to applications in circles, polygons, and right triangles. Students learn how to compute the area of plane figures and apply trigonometric skills to problem-solving in their work with a variety of 2-D shapes. Students will apply principles of algebra with continued practice and reinforcement while also demonstrating increasing flexibility with coordinate geometry, building a strong foundation for success in higher mathematics.

Prerequisites: Returning students-Algebra I;
New students-by placement test

## BRIDGE TO ALGEBRA II

1-block course; Open to grades 9-12
Students will review Algebra 1 topics including solving linear equations and inequalities, solving absolute value equations and inequalities, direct variation word problems, graphing linear functions, graphing absolute value equations, graphing piecewise functions, solving systems of linear equations.

Prerequisites: Returning students-Geometry B and below and/or Algebra I B and below;
New students-by placement test

## ALGEBRA II

3-block course; Open to grades 9-12

This course extends the algebraic principles learned in Algebra I, including an exploration of different number systems such as radical and complex numbers. Students will study the algebraic and graphical properties of a wide variety of functions including quadratic, polynomial functions, radical, rational, trigonometric, exponential and logarithmic.

Prerequisites: Returning students—Bridge to
Algebra II or Geometry B+ or higher;
New students-by placement test

## ADVANCED ALGEBRA II

2-block course; Open to grades 9-12
The course assumes a strong mastery of the material in Algebra I and an ability to manage material at a faster pace than is offered in Algebra II. The course will broaden a student's understanding of foundation topics while applying these topics to more complex problems. New topics such as polynomial, logarithmic, and rational numbers will be studied. In addition, students will learn skills in abstract reasoning and quantitative thinking with non-traditional problems as well as exploring the full capabilities of the graphing calculator.

## Prerequisites: Returning students-by placement test, Geometry A or higher; New students-by placement test and the Academic Dean and Math Department Chair's approval

## TRIGONOMETRY

1-block course; Open to grades 9-12
Trigonometry is a field of mathematics in which the geometric properties of the angles and side lengths of triangles are used in both theory and real-world applications. Foundational geometry concepts will be extended in order to address right-triangle relationships, the unit circle, equations with and graphs of all six trigonometric functions, sinusoidal motions, inverse trigonometric functions, identities, double-angle formulas, and half-angle formulas. This course is taken in conjunction with Precalculus or Advanced Algebra II and is a prerequisite for Calculus and AP Calculus AB.

Prerequisites: Returning students-Advanced Algebra II or Precalculus; New students-by
placement test and the Academic Dean and Math Department Chair's approval

## PRECALCULUS

2-block course; Open to grades 9-12
This course focuses on extending topics from Algebra II, including quadratic, polynomial, radical, rational, exponential and logarithmic functions. New units, such as conic sections, sequences and series, limits, and the definition of the derivative will be introduced. This course is designed for students who will proceed to the concepts in Calculus.

Prerequisites: Returning students-Algebra II with a B- or higher or Applied Mathematics (3 blocks); New students-by placement test and the Academic Dean and Math Department Chair's approval

## ADVANCED PRECALCULUS

3-block course; Open to grades 9-12
This course provides an introduction to higher mathematics and helps to develop the skills and study habits necessary for a rigorous math program. This course will continue to expand on topics from Advanced Algebra II, including rational, trigonometric exponential and logarithmic functions. New units, such as conic sections, sequences and series, limits, vectors, parametric and polar equations and derivatives will be introduced. This course is designed to prepare students for AP Calculus.

Prerequisites: Returning students-Advanced Algebra II with a A- or higher; by placement test and department approval; New students-by placement test and the Academic Dean and Math Department Chair's approval

## CALCULUS

3-block course; Open to grades 9-12
This course provides an introduction to first-year college calculus. Topics will include a review of functions, limits, continuity, rates of change, the derivative, and integration. Emphasis is on understanding of concepts and mechanical manipulation.

Prerequisites: Returning students-Trigonometry, Precalculus with a B- or higher, or Advanced

Precalculus; New students-by placement test and the Academic Dean and Math Department Chair's approval

## AP CALCULUS AB

3-block course; Open to grades 10-12
This course continues the path to higher mathematics and helps to develop the skills and study habits necessary for a rigorous math program. Students explore differential and integral calculus and their applications while learning to approach problems from a variety of perspectives-graphical, analytical, numerical, and verbal. Technology is used to explore the behaviors of functions and to make connections with analytic procedures. Students are prepared to sit for the Advanced Placement Calculus AB exam in the spring.
Prerequisites: Trigonometry, Advanced Precalculus with a B or higher, Precalculus with an $A$ or higher, or Calculus, and department approval.

## AP CALCULUS BC

3 or 4-block course; Open to grades 9-12
In this rigorous course, students review the topics covered in Calculus AB, extend the procedures learned to include more sophisticated integration methods, and explore vectors, parametric and polar functions, and techniques in solving differential equations. Students analyze the behavior of sequences and series beyond arithmetic and geometric ones, with particular attention to divergence, convergence, intervals of convergence, and various test methods. Technology is used, particularly the programmable capabilities of the calculator, to simulate reallife applications of the concepts and to enhance understanding. Students are prepared to sit for the Advanced Placement Calculus BC exam in the spring. Students who complete AP Calculus AB prior to taking this course may elect not to take the first block of BC.

Prerequisites: Trigonometry, Advanced Precalculus with a A- or higher, AP Calculus AB with a B or higher, or Calculus with an $A$ or higher, and department approval.

## MULTIVARIABLE CALCULUS

3-block course; Open to grades 9-12
This course provides an introduction to multivariable and vector calculus. The course covers vectors and analytic geometry in three dimensions, partial differentiation, multiple integration, and ends with vector calculus topics that build up to Green's, Stokes', and the Divergence Theorem. Students develop new prob-lem-solving and critical reasoning skills to prepare them for further study in mathematics, the physical sciences, or engineering. Topics include surfaces in three-dimensional space, algebraic and geometric properties of vectors and vector functions in two and three dimensions, dot products and cross products, derivatives and integrals of vector functions, partial derivatives of functions of several variables, directional derivatives and gradients of scalar functions, multiple variable maximum and minimum value problems, double and triple integrals, line integrals, Green's theorem, and Stoke's theorem. This course will be offered on a rotating basis with Linear Algebra and Differential Equations and will be offered in '24-'25.

Prerequisites: AP Calculus BC or AP Calculus AB with an $A$ or higher.

## LINEAR ALGEBRA

3-block course; Open to grades 9-12
This course provides a study of computational and proof techniques of matrix algebra and an introduction to vector spaces. It pushes students to ask questions and communicate mathematical thinking. Topics covered include matrix algebra, systems of linear equations, eigenvalues and eigenvectors, least squares, vector spaces, inner products, and introduction to numerical techniques, and applications of linear algebra. Students also explore linear transformations, matrix representations of a linear transformation, characteristics and minimal polynomials, and diagonalization of a matrix. This course will be offered on a rotating basis with Multivariable Calculus and Differential Equations and will be offered in '25-'26.

Prerequisites: AP Calculus BC or AP Calculus AB with an $A$ or higher.

## DIFFERENTIAL EQUATIONS

3-block course; Open to grades 9-12
This course introduces first order differential equations and systems, second and higher order linear equations, solutions by series and Laplace transform, and applications. Students develop new problemsolving and critical reasoning skills preparing them for further study in mathematics, the physical sciences, or engineering. The course covers initial value problems, solution curves, separable and exact equations, linear and nonlinear models of first order ODEs, non/homogeneous linear equations with constant coefficients, the reduction of order, undetermined coefficients, variation of parameters, Cauchy-Euler equations, Green's Functions, Spring/Mass systems, Series circuit analogues, Laplace Transforms, The Transforms of Derivatives, Operational Properties, The Dirac Delta Function, Systems of Linear Differential Equations, Inverse Transforms, Power Series, and Solutions about Ordinary and Singular Points. This course will be offered on a rotating basis with Linear Algebra and Multivariable Calculus and will be offered in '23-'24.

Prerequisites: AP Calculus BC or AP Calculus AB with an $A$ or higher

## COMPUTER SCIENCE

1-4 block course; Open to grades 9-12
Computers and technology are ubiquitous. Learning computer programing helps students develop critical thinking and problem-solving skills, prepares them for a wide range of technology-related careers, and enables them to harness the power of technology to create innovative solutions to real world problems.

All computer science courses provide students with hands-on experience in designing, implementing, and evaluating computer science projects using the Python programming language. Students will learn best practices in software development, debugging and testing while exploring important ethical considerations that arise in the field of computer science include artificial intelligence, privacy, security, and the impact of technology on society.

All courses satisfy the coding graduation requirement.

## COMPUTER SCIENCE I

1-block course; Open to grades 9-12
A first look at computer programming in Python. This course will take a project-based approach to developing essential programming skills. Students will write programs using variables, user interaction, basic data structures, conditional and logical control structures, functions, and other topics in modern Python programming. With this strong foundation, "Advanced Programming" courses are open to interested students following completion.

## Prerequisite: Algebra I

Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE II

1-block course; Open to grades 9-12
Building upon the topics from Computer Science I, Computer Science II takes a project-based approach to developing more advanced programming skills. In addition to the topics covered in Computer Science I, students will work with complex data structures, write programs that read from and write to external files, define classes for use in object-oriented programming, and explore other topics in modern Python programming.

Prerequisite: Computer Science 1 or Placement test Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE III

1-block course; Open to grades 9-12
Building upon the topics from Computer Science I and II, Computer Science III students will learn how to design, implement, evaluate, and iterate on complex problems with Python. Topics covered include advanced data structures and algorithms, different programming paradigms, software development best practices, project management methodologies, and design thinking as they develop real world programming skills. Through hands-on projects and group work, students will apply their knowledge to create fully executable computer programs solving realworld problems.

Prerequisite: Computer Science 2 or Placement test Meets Interdisciplinary and Coding credit

## COMPUTER SCIENCE SEMINAR

## 1-block course; Open to grades 9-12

This culminating, student-directed and project-based computer science course combines all skills learned in Computer Science I, II, and III. Students will use programming skills and the design thinking process to identify real-world problems and create innovative solutions. By the end of this course students will have practical experience in developing real-world applications throughout all phases of the design cycle, from ideation to presentation and iteration.

Prerequisite: Computer Science 3.
Meets Interdisciplinary and Coding credit

## STATISTICS

1-3 block course; Open to grades 9-12
Some say that we live in the age of data. These statistics electives allow students to explore different ways to understand and communicate about the data all around us. Students will be able to explore some of their own interests through the study of statistics.

## DATA AND DISPLAY

Students examine data on two fronts: how to analyze data using scatterplots and regression calculations, and how to display data to show relationships between variables. These displays will include dot plots, bar charts, stem and leaf diagrams, box plots and histograms. Students further learn when to use each of these displays optimally. This hands-on, project-based course will expose students to real uses of statistics and the role data plays in our fact-hungry culture. In addition to learning how to use tables and display data, students will learn and apply standardization and the normal curve.

## Prerequisites: Algebra II

## PROBABILITY

This course centers on the rules and applications of probability. Students will explore many facets of probability from games of chance to simulation to applications in fields as diverse as the internet and medicine. In addition to learning probability rules, permutations and combinations, students will use Venn diagrams,
two-way tables and tree diagrams. Students will learn about conditional probabilities and independence. This hands-on, project-based course will expose students to the real uses of probability.

Prerequisites: Statistics: Data \& Display

## DATA SCIENCE

This course is designed to introduce students to the growing discipline of Data Science. This class will extend the topics learned in Data Science and use digital tools to collect, present, and analyze data. This course uses a project-based approach using real-world data with a focus on practical applications and analysis. There will be a focus on finding and communicating meaning in data and thinking critically about arguments based on data.

## Prerequisite: Algebra II

## AP STATISTICS

3-block course; Open to grades 11, and 12
This course introduces students to the major concepts about and tools for collecting and analyzing data. The course begins with a thorough examination of descriptive statistics including graphical and numeric methods for describing data, and observational study vs. experimental design. The next topics include probability, random variables and probability distributions. The course then moves into inferential statistics, covering sampling distributions, confidence intervals and hypothesis testing for single samples and two populations or treatments. Finally, homogeneity, linear regression and inferences about correlation are examined. Students are prepared to sit for the AP Statistics exam in May.

Prerequisites: Advanced Algebra II, or Precalculus, (or higher), or Applied Mathematics (3 blocks) and department approval.

## APPLIED MATHEMATICS

1-3 block course; Open to grades 9-12
Mathematics is all around us, but where is it exactly? Students will explore the mathematics of different parts of our world. Students taking these courses will learn not only the process of how to "do" mathematics but will focus on the context of the problem and see the connection between the abstract world of mathematics and our own concrete world. Students may take each course as an elective or as three blocks to create the equivalent of a full-year math class.

## APPLIED MATHEMATICS: FINANCIAL MATHEMATICS: PERSONAL FINANCE

In this course students will look at the mathematics of personal finance including budgeting, mortgages and taxation. In learning the mathematics of personal finance students will explore mathematical concepts such as exponential functions, sequences and series, and statistics. NOTE: This class was previously called "Financial Mathematics" in the 21-22 Academic Year Prerequisite: Algebra II. Meets Interdisciplinary credit.

## APPLIED MATHEMATICS:

## FINANCIAL MATHEMATICS

Investing In this course students will look at the mathematics of personal finance including savings accounts, stocks, bonds, and other financial savings instruments. In learning the mathematics of personal finance students will explore mathematical concepts such as exponential functions, sequences and series, and statistics. Meets Interdisciplinary credit.

## Prerequisites: Algebra II



## APPLIED MATHEMATICS: MATH IN MOTION

In this project-based course, students will bring together math, science, technology, arts and engineering, to design solutions to problems. The course seeks to build upon the foundations of the STEAM Fundamentals class and push students to connect their learning to topics in mathematics and physics. Students will learn how the Design Cycle can be used to research, plan, test and engineer solutions to problems. Additionally, skills from physics and mathematics will be used to aid in design, predict outcomes, gather data, and test theories.

Prerequisites: Algebra II
Meets Interdisciplinary credit


## SCIENCE DEPARTMENT

## GRADUATION REQUIREMENTS: 9 CREDITS OF LAB SCIENCES (BIOLOGY, PHYSICS, CHEMISTRY)

The Science Department believes that the study of science is vital to the development of intellectual curiosity and analytical thinking. Students learn to see science as a process as well as a body of knowledge about the natural world.

It is the philosophy of the Science Department that students benefit from exposure to each of the three sciences: biology, chemistry, and physics, which is reflected in the graduation requirement. These required courses must be taken on the Madeira campus. Summer courses may be used for enrichment and do not fulfill graduation requirements.

## BIOLOGY

3-block course; Open to grades 9 and 10
Biology at Madeira is a foundational course that introduces the science skills that students will develop and use throughout high school. Students will study the process of science and will survey the study of life. Laboratory exercises will be performed to reinforce concepts, and current events will be used to supplement discussions of biological issues. Topics may include (but are not limited to) chemistry and biochemistry, cell types, cellular structure and function, cell division, genetics, DNA/RNA/protein synthesis, biotechnology, evolution, diversity of life, and ecology.

Prerequisites: None

## APPLIED CHEMISTRY

3-block course; Open to grades 11 and 12
Applied Chemistry includes one mod of Chemistry I plus two mods that expand on the foundation of chemistry concepts by connecting to real-world applications. The scientific, economic, and societal aspects of each topic will be investigated. Students will have the opportunity to explore their own areas of interest through research and presentations.

Prerequisites: Biology.

## Modules:

## CHEMISTRY I: INTRODUCTION TO CHEMISTRY

Required first block

## APPLIED CHEMISTRY: GLOBAL CHALLENGES

This course focuses on the chemistry of major global challenges of the past, present, and future. Topics covered may include climate change, energy resources, ozone depletion, pesticides, infectious diseases, food and nutrition, and more.

## APPLIED CHEMISTRY: MODERN MATERIALS

This course focuses on the chemistry related to the development of significant modern materials and how they impacted world events. Topics covered may include dyes, textiles, pharmaceuticals, polymers, plastics, explosives, and more.

## CHEMISTRY

3 -block course; Open to grades 10, 11, and 12
This course is intended to familiarize students with the fundamental concepts of chemistry as a physical science and includes chemical investigation through experimentation. This course requires the student to work with abstract concepts and requires considerable mathematical problem-solving skill. Topics covered in this course include organization of the periodic table, development of atomic theory and atomic structure, chemical bonding, writing and naming chemical compounds, classifying, balancing, and predicting products for chemical reactions, calculations with chemical quantities, intermolecular forces, the behavior of solids, liquids, gases, and solutions, chemical kinetics, chemical equilibrium, acid-base chemistry, and electrochemistry.

Prerequisites: Biology. Corequisites:
Must be currently taking Advanced Algebra II (or higher).

## Modules:

## CHEMISTRY I: INTRODUCTION TO CHEMISTRY

Topics will include atomic structure, elements, the periodic table and trends, bonding, molecular structures, kinetic theory, phases of matter, equilibrium, and writing and balancing reactions.

## CHEMISTRY II: QUANTITATIVE REACTIONS

Topics will include nomenclature, unit conversions, chemical composition, chemical reactions, stoichiometry, and solutions.

## CHEMISTRY III: THERMODYNAMICS

AND EQUILIBRIUM
Topics will include Kinetic Molecular Theory, Gas Laws, Acid base properties, pH, kinetics, equilibrium, redox reactions and applications, and atomic chemistry.

## APPLIED PHYSICS

3 -block course; Open to grades 10, 11, and 12
This project-based course is an introduction to the fundamental ideas of physics including applications to everyday experiences using concepts, mathematical calculations, and frequent hands-on applications. In their study of the physical universe, students will delve into many branches of physics, including matter and its motion, the nature of light, sound phenomena, electricity and magnetism. Mathematical calculations are used to enhance and describe ideas that are initially presented at a conceptual level. This course may be used to meet the Physics requirement for AP Biology but may not be used to meet the Physics requirement for AP Chemistry or AP Physics C. Prerequisites: Biology. Corequisites: Geometry.

## Modules:

## APPLIED PHYSICS I: FORCES AND MOTION

Topics include vectors, linear motion, projectiles, and Newton's Laws of Motion.

## APPLIED PHYSICS II: ENERGY

Topics may include the study of uniform circular motion, universal gravitation, electricity and magnetism, conservation of energy and conservation of momentum.

## APPLIED PHYSICS III:

## SIMPLE HARMONIC MOTION AND WAVES

Topics may include simple harmonic motion, springs and spring forces, mechanical waves, sound, standing waves, and geometric optics.


## PHYSICS

3-block course; Open to grades 11 and 12
The focus of Physics is to examine, explain, and analyze physical phenomena that occur in the world around us. New concepts are developed primarily through class discussion and laboratory work, and solving problems related to this material refines the understanding of these concepts. Students are expected to take responsibility for their own learning, both by working independently as well as with other students.

Prerequisites: Biology, Chemistry with a B- or higher. Corequisites: Advanced Precalculus (or higher). If in Precalculus, permission required from Academic Dean and chair of the science department.

## Modules:

PHYSICS: FORCES AND MOTION
Topics include forces, motion, and Newton's Laws of Motion.
Required first course

## PHYSICS: ENERGY AND MOMENTUM

Topics include the conservation of energy and conservation of momentum.

## PHYSICS: ROTATION MOTION

Topics include simple harmonic motion, torque and conservation of angular momentum.

## AP BIOLOGY

3-block course; Open to grades 11 and 12
AP Biology is a college-level course for students who want to learn more about biology and what research questions scientists are asking. Topics include biochemistry, cell cycle, genetics, evolution, and ecology. Research skills including statistics, data analysis, and experimental design will also be taught and explored. AP Biology students are prepared to take the AP Biology exam in May.
Prerequisites: Applied Chemistry or Chemistry, B- or Higher in Biology. Corequisite: Physics

## AP CHEMISTRY

3-block course; Open to grades 11 and 12
AP Chemistry is a college-level, comprehensive study of chemistry for students with advanced mathematical skills, a background in basic biology, chemistry, and physics, and a strong interest in chemistry. This course covers topics introduced in Chemistry with greater depth and sophistication and focuses on the more complex topics of thermodynamics, chemical kinetics, chemical equilibria, electrochemistry, and the behavior of matter at the molecular level. Lectures, class discussions, mathematical problem solving, demonstrations, and laboratory investigations are the primary methods of developing these and other topics. This course is taught like a college course and requires the students to take responsibility for their own learning. The course work includes abstract material, involves complex problem solving, and demands explanations of phenomena rather than simple statements of theories, trends, or observations. AP Chemistry students are prepared to take the AP Chemistry exam in May.

Prerequisites: Biology, A- (or higher) in Chemistry, B+ (or higher) in Physics. Corequisite: Physics or AP Physics C

## AP PHYSICS C: MECHANICS

3-block course; Open to grades 11 and 12
Designed to prepare students for the AP Physics C exam, this is a calculus-based course in Mechanics. We will explore the concepts of kinematics, dynamics, energy, rotational motion, momentum and other applications of calculus to the physical world. New concepts will be developed through class, lab work, and experimental design. Students will work independently and in groups but are responsible for their own learning. AP Physics C students will be prepared to take the AP Physics C: Mechanics exam in May.

Prerequisites: Biology, Chemistry and Physics Corequisites: AP Calculus BC or AB.

## Environmental Science

1-block course; Open to grades 9-12
Environmental Science is an interdisciplinary field that examines how natural systems function on Earth and how humans affect the environment. The environment is defined as all the living and nonliving factors around us. Environmental Science incorporates many disciplines: biology, chemistry, physics, politics, sociology, economics, and ethics. Environmental Science courses will utilize the natural resources of the Madeira campus.

## ENVIRONMENTAL SCIENCE: FIELD ECOLOGY

Students will apply hands-on field methods to address an environmental proposal in this lab-based course and should expect to be outside in the field (on campus) multiple times per week.

## Prerequisite: None

## ENVIRONMENTAL SCIENCE: CITIZEN SCIENCE

Students will learn the background, methodology, and skills needed to participate in ongoing citizen science projects with the result of contributing data to the scientific community in this lab-based course. Students should expect to be outside in the field (on- and/or off-campus) multiple times per week.

## Prerequisite: None

## ENVIRONMENTAL SCIENCE: CONTEMPORARY ISSUES

In this course, students will study the history, science, and policy issues related to current environmental matters. Topics covered will include a selection of the following: biodiversity; food, agriculture, and soil; water resource and pollution issues; solid waste disposal; fossil fuels; alternative energy resources; the atmosphere and air pollution; acid deposition; ozone depletion; and climate change. Students will play a role in determining which topics are covered during the module. The coursework will be supported by laboratory work. Students should expect to be outside (on campus) one time per week.

Prerequisite: None (this course is the same as the Environmental Science course offered in 21-22)

## Forensic Science

1-2 block course; Open to grades 9-12
This course is designed to give students the opportunity to learn how scientific principles are applied to fields such as law enforcement and anthropology. From fingerprints to DNA, bite marks to shoe prints, and blood spatter to trace evidence, forensic science requires the knowledge of biology, geology, botany, chemistry, and physics. Using a multidisciplinary and hands-on approach, students will learn the fundamentals of forensic science and develop logical problem-solving skills through both case studies and laboratory experiments.

## Prerequisites: None

Meets Interdisciplinary credit

## Modules:

## FORENSICS: BIOLOGICAL EVIDENCE

Topics may include hair and DNA analysis, blood spatter patterns, bones and bite marks, and toxicology.

## FORENSICS: PHYSICAL EVIDENCE

Topics may include crime scene analysis, police line-ups, types of evidence, microscopy, patterns \& impressions of evidence, trace evidence, and handwriting analysis.

## PROGRAMMING FOR ROBOTICS

1-block course; Open to grades 9-12
Robotics immerses students in the incredible innovation around the world in robotics and artificial intelligence. Students will learn the fundamentals of computer programming through the lens of I would like art related to compute science and coding. robotics to solve real-world problems. This project-based course uses a combination of videos, in-class demonstrations and hands-on trial and error. Students will learn and implement computational thinking, the engineering design process and effective problem solving by coding robots with Arduino IDE (C/C++).

## Prerequisites: None

This course satisfies the Coding and Interdisciplinary requirement

KINESIOLOGY: FUNCTIONAL HUMAN MOVEMENT<br>1-block course; Open to grades 10-12

This course will introduce students to the fundamentals of human movement. Students will be able to identify major skeletal structures along with related articulations (joints) and landmarks of that system. Students will also gain an understanding of the muscular system related to movement and be able to comprehend concepts such as origin/insertion, agonist/ antagonist, and concentric/eccentric movements.

Prerequisites: Biology.
Meets Interdisciplinary credit

## MARINE ECOLOGY

1-block course; Open to grades 10-12
Students will examine the taxonomy of life in the oceans, the characteristics that make marine organisms successful in this unique environment and will explore the varying ecologies of the world ocean. This course will be offered on a rotating basis ('24-'25) with Marine Environmental Issues and will include a required 3-day weekend field trip to the Chincoteague Bay Field Station occurring during the mod.
Required field trip fee.
Prerequisite: Biology

## MARINE ENVIRONMENTAL ISSUES 1-block course; Open to grades 10-12

Students will investigate the current environmental issues that plague the marine habitat and its biodiversity in this project-based course. This course will be offered on a rotating basis with Marine Environmental Issues and will include a required 3-day weekend field trip to the Chincoteague Bay Field Station occurring during the mod. Required field trip fee.

## BIOORGANIC CHEMISTRY <br> 1-block course; Open to grades 11-12

In this course, students will learn foundational organic chemistry including nomenclature and functional groups. Building on this knowledge, students will explore the structural, chemical, and functional properties of the major types of biomolecules, such as carbohydrates, proteins, vitamins, and more. As time allows, students may examine the mechanisms by which certain poisons, drugs, and medications affect the body.


## WORLD LANGUAGES DEPARTMENT

## GRADUATION REQUIREMENTS: 9 CREDITS

The World Languages faculty aims to develop the qualities at the heart of all good education: an inquiring mind, a broad-minded attitude toward other cultures, and an interest in the world.

The World Languages Department adheres closely to the ACTFL (American Council on the Teaching of Foreign Languages) standards and guides students to develop 21st century skills.

Nine blocks of world languages are required, and the Department strongly encourages students to take a language all four years and supports students who want to study more than one world language. Moreover, the Department typically nominates students each year to the Virginia Department of Education-sponsored Governor's Foreign Language Academies and supports students interested in immersive summer programs. New student course placement includes completion of a placement test, which includes a writing sample and a personal questionnaire. The Academic Dean and Chair of the Language Department manage the course placement process to ensure students enroll in the right course to support their growth as a language learner.

LANGUAGE PLACEMENT: New students take placement tests to determine enrollment in the appropriate language course. The Chair of the Language Department and the Academic Dean make all course placements.

## French

## FRENCH I

3-block course; Open to grades 9-12
The course is designed for students who have not studied French or have acquired very limited basic knowledge of French. It focuses on the acquisition of basic grammatical structures and vocabulary in culturally authentic contexts through speaking, reading, writing, and listening comprehension. The students will explore the cultures and traditions in the French-speaking world. After the completion of the course, students will be able to describe people and things, talk about past times, weekend activities and sports, express possession, narrate in the present and make plans. This course is conducted mostly in French with limited usage of English.

Prerequisite: No previous acquisition of French or by placement process

## FRENCH II

3-block course; Open to grades 9-12
Students build vocabulary and grammar skills from Level I. Most verb tenses and moods are covered such as passé composé, imperfect, present conditional, future simple, and subjunctive. At the end, students will be able to describe health and medical conditions, talk about jobs and daily life, discuss the environment, express their beliefs and opinions about technology, narrate past experiences, and consider future plans.

Prerequisite: Returning students-French I or Bridge to French II; New students-by placement test

## FRENCH III

3-block course; Open to grades 9-12
This course further develops students' communication and literacy skills. Students enhance their language proficiency while improving their cultural competency using a variety of authentic texts (articles, interviews, literary texts and video). Students are immersed in the target language through conversations about daily life and current events and discussions and debates in which they offer opinions and exchange ideas. Through an interdisciplinary approach, students learn about the life, people and history of Francophone countries, while building cultural awareness and understanding. This course creates a path for students to continue to French IV or AP French.

Prerequisite: Returning students-French II; New students-by placement test

## FRENCH IV (THEATRE \& CINEMA)

3-block course; Open to grades 11 and 12
This course consists of two parts. The first part ( 2 modules) introduces students to the history of western theatre and classic French plays. Selected classic and contemporary texts will be used in the class to help students gain a basic understanding of the historical evolution of French and Francophone theatre. Students will create a glossary of both technical and literary terms to utilize when analyzing the works of great playwrights. The second part of the course ( 1 module) focuses on the conversations between French cinema and American cinema. Students will gain knowledge of the origin of the cinematographic art, the impact of Hollywood film noir on France's film productions, and the French New Wave Movement.

Prerequisites: Returning students-French III; New students-by placement test

## AP FRENCH LANGUAGE \& CULTURE <br> 3-block course; Open to grades 11 and 12

This course follows the guidelines of the College Board AP French Language and Culture course and provides opportunities for students to build their proficiency in the modes of communication from the Intermediate to the Advanced range according to ACTFL standards. The three modes of communication (Interpretive, Interpersonal, and Presentational) defined in the Standards for Foreign Language Learning in the 21st Century are foundational to the AP French Language and Culture course.

The AP French Language and Culture course takes an interdisciplinary approach to language proficiency. The course engages students in an exploration of culture, socio-economy, and politics, in both contemporary and historical contexts. When communicating, students in the AP French Language and Culture course demonstrate an understanding of the cultures, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings. Students study the six Curricular Themes: Families and Communities, Personal and Public Identities, Contemporary Life, Beauty and Aesthetics, Global Challenges and Science and Technology. Students are prepared to sit for the AP French Language and Culture exam in May.

Prerequisites: Returning students-French III with an A- and department approval; New students-by placement test and departmental approval


## Latin

## LATIN I

3-block course; Open to grades 9-12
Latin I introduces students to the fundamentals of Latin grammar and vocabulary through the read-ing-based approach of the Cambridge Latin Course. Students learn to translate Latin through stories that follow a Roman family from Pompeii to Roman Britain and Alexandria while illustrating important aspects of Roman history, culture and daily life. Students explore the language and culture of the Roman Empire through projects and examine the relationship between Latin and English including English words derived from Latin and Latin phrases and abbreviations that we use to this day.

Prerequisite: None

## LATIN II

3-block course; Open to grades 9-12
Latin II continues to develop students' ability to read texts in the context of the culture and society of ancient Rome with the goal of reading extended, authentic Latin texts. Readings and projects expand students' knowledge of Roman culture and history with a focus on the Roman military, Roman philosophy and the ins and outs of life in Rome.

Prerequisite: Returning students-Latin I;
New students-by placement test

## LATIN III

3-block course; Open to grades 10-12
Latin III reinforces the work students have done in Latin II and introduces them to the translation and interpretation of authentic Latin texts. Students become familiar with a variety of styles and genres as they read and analyze representative samples of the most famous Latin authors and study the works in their cultural context. Readings include excerpts from Pliny's Letters, the epigrams of Martial, the poems of Horace and Catullus, Ovid's Metamorphoses, Vergil's Aeneid, and Tacitus's Annals.

Prerequisite: Returning students-Latin II;
New students-by placement test

## LATIN IV

3-block course; Open to grades 11-12
Students continue to develop their ability to engage with authentic Latin texts in their literary, social and political context through a reading of Vergil's Aeneid with supplemental readings that include the work of other Augustan poets, complementary accounts of Rome's foundation, and historical accounts of Rome under Augustus. We examine how the Aeneid interacts with Homer's Iliad and Odyssey, how it helps redefine the Roman Empire after years of civil wars and the fall of the Republic, and whether it is propaganda for a new kind of rule or subtle criticism of the costs of empire-building. More broadly, we examine how the stories people tell about their past can express who they want to be, and inadvertently reveal who they are.

Prerequisite: Returning students-Latin III; New students-by placement test

## AP LATIN

3-block course; Open to grades 9-12
The AP Latin course focuses on the in-depth study of selections from two of the greatest works in Latin literature: Vergil's Aeneid and Caesar's Gallic War. The course requires students to prepare and translate the readings and place these texts in a meaningful context, which helps develop critical, historical, and literary sensitivities. Throughout the course, students consider themes in the context of ancient literature and bring these works to life through classroom discussions, debates, and presentations. Additional English readings from both of these works help place the Latin readings in a significant context. College Course Equivalent AP Latin is approximately equivalent to an upper-intermediate (typically fourth- or fifth- semester) college or university Latin course.

Prerequisites: Latin IV
Course is not offered in '23-'24.

## CLASSICAL MYTHOLOGY AND ETYMOLOGY

1-block course; Open to grades 9-12

Both the language we speak and the stories we tell reflect the influence of ancient Greece and Rome. This course explores the roots of Greek and Latin in English as well as the roots of ancient myth in modern narratives. Students engage with the most famous versions of the myths in antiquity and explore how adapted versions of the myths reflect the interests and concerns of the societies that adapt them. We discuss excerpts of poems, novels, and films and focus on mythical depictions in ancient and modern paintings, which students learn to decipher for their mythological content. Topics include Greek and Roman gods, constellations, the Greek alphabet, story structure and genre, the history of the English language, and important concepts in historical linguistics.

Prerequisite: None

## ANCIENT MEDICINE AND MEDICAL TERMINOLOGY <br> 1-block course; Open to grades 9-12

The origins of western medicine intersect with the history of scientific thought and the culture and society of ancient Greece, Egypt, and Rome; the language of modern medicine reflects its roots in the Greek and Roman worlds. Through an examination of the development of Hippocratic medicine from its religious roots, Alexandrian anatomical developments, Roman Medicine, and the contributions of Galen, students learn about medicine as it was practiced in the ancient world. They trace subsequent developments to investigate the factors that encouraged progress and those that stood in its way. Students simultaneously develop a working knowledge of basic medical terminology.

## Prerequisite: None

## Spanish

## SPANISH I

## 3-block course; Open to grades 9-12

This course introduces students to some basic communicative functions in speaking, reading, writing, and listening. Students learn vocabulary and structures of the Spanish language in culturally authentic contexts while exploring traditions and cultures in the Spanish-speaking world. At the end of this course, students will be able to describe people and things, to talk about past times, weekend activities and sports, to express possession, to narrate in the present and to make plans.

Prerequisite: None, this course is for beginners or students who need to learn the basics and build a foundation for Spanish II, as demonstrated on the placement process.

## SPANISH II

3-block course; Open to grades 9-12
This course reinforces and expands the student's knowledge of the basic communicative functions, vocabulary and structures learned in Spanish I. Students continue to develop their linguistic skills (listening, reading, speaking and writing) using authentic materials and discuss cultural aspects of Spanish-speaking countries. At the end of this course, students will be able to describe health and medical conditions, talk about jobs and daily life, discuss the environment, express their beliefs and opinions about technology, narrate past experiences, and consider future plans.

Prerequisite: Returning students-Spanish I
New students-by placement test

## SPANISH III

3-block course; Open to grades 9-12
This course further develops the communication and literacy skills introduced in the first two years of our Spanish program. Through a variety of authentic texts (articles, interviews, literary texts and video) students enhance their language proficiency while improving their cultural competency. Through an interdisciplinary approach, students explore the life, people and history of different Spanish-speaking countries to strengthen their awareness of other cultures and to think more critically about their own.

Prerequisite: Returning students-Spanish II; New students-by placement test

## SPANISH IV

3-block course; Open to grades 9-12
This course takes a fresh approach to advanced Spanish language, using a culturally driven text that explores language through culture of the Spanishspeaking world. It incorporates culture and communication, with a focus on developing critical thinking, oral and written textual analysis at an advanced level. Students are expected to speak solely in the target language. Students explore cultural practices and perspectives in Spanish-speaking communities and continue to develop their proficiency.

Prerequisite: Returning students-Spanish III; New students-by placement test and departmental approval

## AP SPANISH LANGUAGE AND CULTURE

 3-block course; Open to grades 11 and 12This course follows the guidelines of the College Board AP Spanish Language and Culture course and provides opportunities for students to build their proficiency in the modes of communication from the Intermediate to the Advanced range according to ACTFL standards. The three modes of communication (Interpretive, Interpersonal, and Presentational) defined in the Standards for Foreign Language Learning in the 21st Century are foundational to the AP Spanish Language and Culture course. The AP Spanish Language and Culture course is conducted exclusively in Spanish. When communicating, students in the AP Spanish Language and Culture course demonstrate an understanding of the target cultures, incorporate interdisciplinary topics, make comparisons between their communities and Spanish-speaking communities, and use Spanish in real-life settings. Students study the six Curricular Themes: Families and Communities, Personal and Public Identities, Contemporary Life, Beauty and Aesthetics, Global Challenges and Science and Technology. Students are prepared to sit for the AP Spanish Language and Culture exam in May.

Prerequisites: Returning students-Spanish III, a placement test and department approval or Spanish IV with a B+ average and department approval; New students-by placement test and departmental approval


## NON-ATHLETICS D BLOCKS

## D BLOCK REQUIREMENT STARTING '23-'24:

- 9 th and 10th grade -3 seasons yearly, at least two of which must be team experiences.
- 11th and 12th grade-if Co-Curriculum internship is during the school year, no D block requirement during the season in which the internship falls, with a few exceptions (Riding for horse owners, Dance for Madeira Dance dancers). Of the remaining 2 seasons required, at least 1 must be movement related. If Co-Curriculum internship is not during the academic year, 3 seasons yearly, at least two of which must be team experiences.
Movement D blocks include a D block where the student is physically participating in an endurance based non-stationary activity.


## D BLOCK PHILOSOPHY

- At The Madeira School, we believe that D block, which is the experiential wing of the academic curriculum, allows students:
- To develop a passion outside the academic realm
- To explore or deeply dive
- To be part of something larger than themselves
- To hone, practice and apply leadership skills
- To create their own path
- To build healthy habits to last a lifetime


## Fall Season

## DANCE

Fall, Winter, \& Spring seasons; Open to grades 9-12
Genres studied: Modern, hip hop, ballet, lyrical, jazz, and contemporary. Two masterclasses offered each season in an even broader range of genre. During the first week evaluation classes will take place to asses which level the dancer will participate in.

Prerequisites: No prior dance experience required. Madeira Dance Company (formally Select) requires an audition which takes place at the end of the Spring Season of the previous year for all returning students. For 11th and 12 th graders, if you are a Madeira Dancer, you must attend D block during the season you are on Co-Curriculum.

## NATURE HIKES

Fall \& Spring seasons; Open to grades 9-12
This activity takes advantage of our idyllic setting on the edge of the Potomac River. Students will explore a variety of trails on campus through the forest and down by Black Pond. There will be periodic trips to nearby parks including Scott's Run and Riverbend Park. Students will increase their knowledge about the natural species on our campus and beyond.

## NEWSPAPER

Fall \& Spring seasons; Open to grades 9-12 The Spectator-Madeira's school newspaper

Students will learn core principles of journalism including accountability, verification, and independence. Along the way, students will acquire practical skills in interviewing, reporting, and composing a variety of story types (such as news, feature, and editorial). Students can also expect to practice photography and arranging layouts using publishing programs like InDesign. Throughout each season, Spectator students will also explore case studies to build awareness of journalistic ethics. This is a hands-on educational experience where students learn to work as a newsroom team.

## Prerequisite: None

## PLAY

Fall season Open to grades 9, 10, 11, and 12
The fall play offers students of various skill levels and experience the opportunity to participate in a ful-ly-staged play as an actor or part of the stage management team. Prerequisite: Auditions are held during student orientation for actors. Students interested in stage management and assistant directing must seek prior approval from the Arts Department.

## YEARBOOK

## Fall \& Spring seasons; Open to grades 9-12

Yearbook exposes students to the variety of skills necessary for producing quality school publications. Girls are introduced to a variety of visual arts, including digital photography, the use of photo editors, and principles of layout design. In addition, students learn the basics of copywriting and journalism, including conducting interviews, and writing news stories, reviews and features. This is a hands-on educational experience, where students learn by doing. Students are given the responsibility of producing their own pages in the yearbook.

## Prerequisite: None

## Winter Season

## DANCE

Genres studied: Modern, hip hop, ballet, lyrical, jazz, and contemporary. 2 masterclasses offered each season in an even broader range of genre. During the first week evaluation classes will take place to asses which level the dancer will participate in.

Prerequisites: No prior dance experience required. Madeira Dance Company (formally Select) requires an audition which takes place at the end of the Spring Season of the previous year for all returning students. For 11th and 12 th graders, if you are a Madeira Dancer, you must attend D block during the season you are on Co-Curriculum.

## GATE

Winter season; Open to grades 9-12
Gate: Madeira's student journal of literature and the arts

Students will acquire practical skills in design and layout (using programs like InDesign) and in learning the editorial process. They will also exercise their creativity in organizing Gate contributions according to theme, genre, concept, and/or style-in addition to serving as contributors themselves, should they wish. Gate staff will gain technical know-how and learn about the philosophical and ethical issues of publishing like censorship, anonymity, and managing the relationship between authors and editors. Students will also be responsible for marketing and outreach, and for identifying innovative ways of showcasing the publication such as podeasting and Web publishing.

## Prerequisites: None

## MATH TEAM

Winter season; Open to grades 9-12
Students participate in math related challenges, activities, and competitions. No prior math or computer science knowledge is required, only an interest in learning and participating. Students may participate in math competitions.

## MODEL UNITED NATIONS

Winter season Open to grades $9,10,11$, and 12
During the course of their participation, Madeira students learn the basics of United Nations parliamentary procedure, how to write position and background papers, and how to advance committee agendas during active conference sessions. Madeira students may elect-as part of the Model UN experi-ence-to participate in a high-school conference for Model United Nations. We have sent a delegation to NAIMUN, which is a national conference hosted by George Washington University and held in D.C. or AMERIMUNC at American University and expect to return to AMERIMUNC in 2023-2024.

## Prerequisite: None

Special note: For students who elect to participate in outside conferences, there are additional fees not covered by Madeira.

## MUSICAL

Winter season; Open to grades 9-12
The winter musical is for students of all levels of skill and experience in musical theatre and stage managing. Students work as a collaborative ensemble with theatre professionals to rehearse and perform a musical theatre production.

Prerequisite: Audition required for actors.
Students interested in stage management and assistant directing must seek prior approval from the Arts Department.

## YEARBOOK

Fall \& Winter seasons; Open to grades 9-12
Yearbook exposes students to the variety of skills necessary for producing quality school publications. Girls are introduced to a variety of visual arts, including digital photography, the use of photo editors, and principles of layout design. In addition, students learn the basics of copywriting and journalism, including conducting interviews, and writing news stories, reviews and features. This is a hands-on educational experience, where students learn by doing. Students are given the responsibility of producing their own pages in the yearbook.

Prerequisite: None

## Spring Season

DANCE
Fall, Winter, \& Spring seasons; Open to grades 9-12
Genres studied: Modern, hip hop, ballet, lyrical, jazz, and contemporary. 2 masterclasses offered each season in an even broader range of genre. During the first week evaluation classes will take place to asses which level the dancer will participate in.

Prerequisites: No prior dance experience required. Madeira Dance Company (formally Select) requires an audition which takes place at the end of the Spring Season of the previous year for all returning students. For 11th and 12th graders, if you are a Madeira Dancer, you must attend D block during the season you are on Co-Curriculum.

## NATURE HIKES

Fall \& Spring seasons; Open to grades 9-12
This activity takes advantage of our idyllic setting on the edge of the Potomac River. Students will explore a variety of trails on campus through the forest and down by Black Pond. There will be periodic trips to nearby parks including Scott's Run and Riverbend Park. Students will increase their knowledge about the natural species on our campus and beyond.

## NEWSPAPER

Fall \& Spring seasons; Open to grades 9-12 The Spectator-Madeira's online newspaper

Students learn and apply techniques of layout, design and desktop publishing. This is a hands-on educational experience, where students learn by doing.

Prerequisite: None

## SWIMMING

Description to come

## THEATER SHOWCASE

## Spring season; Open to grades 9-12

Theatre Showcase is open to all levels and experience, and is a unique opportunity for students to participate in a performance-based class without the pressure of auditions. The Theater Showcase gives students the chance to explore a variety of theatrical styles and develop their performance skills and technique. Topics covered include improvisation, physical theatre, musical theatre, scene study, and audition technique. The activity will culminate in a showcase performance of student work.
Prerequisite: None

## ENGINEERING AND INVENTION LAB

Fall, Winter \& Spring seasons; Open to Grades 9-12 (maximum of 16 students)
Additional work time outside of class may also be required.

Engineering and Invention Lab is a year-long interdisciplinary project-based activity. Students will work as a team to invent a technological solution to a real-world problem of their choosing. Using design thinking they may develop such technologies as assistive devices, environmental technologies, consumer goods, wearable technology, or an app. This course offers students the opportunity to learn about the steps involved in the invention process including grant writing, budgeting, research, and development, prototyping, and working with stakeholders. Students must be available to meeting with stakeholders and for presentations that may occur outside of class time.

Prerequisites: STEAM Fundamentals or teacher permission

## ESPORTS

Fall \& Spring seasons; Open to Grades 9-12
(maximum of 10 students)
The esports team will work as a team to prepare for internal and external competitions. Students on the esports team will develop skills in teamwork and problem solving while helping to foster self-confidence, independent thinking while maintaining a healthy environment for competition.
Prerequisite: Tryout required

## GLOBAL ACTIVISM

Spring Season; Open to Grades 9-12
Students in Global Activism will discuss theories of change, explore the architecture and toolkit of protests around the world, meet with activists locally and globally, and, ultimately, design (from start to finish) a piece of activism related to art, justice, anti-poverty, anti-racism, immigration, indigenous land rights, the sex-gender system, planetary health, community change, or a topic of choice.


## ATHLETICS DEPARTMENT D-BLOCKS

Physical fitness, whether achieved through team sports or fitness classes, is part of the total educational experience at Madeira. Madeira's athletic and fitness program has something for everyone: competitive interscholastic varsity teams, developmental interscholastic junior varsity teams, and instructional fitness classes.

## ATHLETIC STUDENT ASSISTANT

## Fall, Winter, \& Spring seasons;

Open to grades 10-12
Athletic Team Student Assistant (SA) report to the designated sport specific practice location MondayFriday for the duration of practice (potentially Saturday for ISL Play Days and Invitationals). SA will assist their team/coaching staff with the following tasks: taking attendance, game and event support, updating social media and filming competitions. SA must complete all scheduled team Breakaway workouts each week.

Maximum of 3 students for Varsity Maximum of 2 students for JV

## ATHLETIC TEAM SPORTS INFORMATION ASSISTANT

To receive D-block credit the Athletic Team Sports Information Assistants (SIA) reports to the Sports Information Coordinator Monday-Friday for the duration of practice (potentially Saturday for ISL Play Days and Invitationals). SIA will assist the Sports Information Coordinator and athletic department with the following tasks: creating social media content, creating pre and post-game graphics, running in-game livestream, updating social media and filming competitions, and posting game results. SIA must complete at least 2-3 Breakaway workouts each week.

Maximum of 3-4 students per season

## ATHLETIC DEPARTMENT STUDENT ASSISTANT

 The Athletic Department Student Assistant (ADSA) is expected to work closely with the Athletic Department assisting with daily administrative tasks and longstanding projects. Tasks can include taking attendance, game and event support. To receive D-block credit the ADSA reports to the Hurd Monday-Friday for two hours (potentially Saturday's for ISL Play Days and Invitationals). The ADSA also must complete at least 2-3 Breakaway workouts each week.Maximum of 1 student per season

## ATHLETIC TRAINING STUDENT ASSISTANT

The Athletic Training Student Assistant (ATSA) works with the Madeira Athletic Trainer daily with an expectation to observe and participate in duties connected with injury management. ATSA will learn basic anatomy and common mechanisms of injury. At the completion of each season, students are expected to demonstrate specific competencies based on areas of focus. This position is for students with an expressed interest in a sports medicine related field.

Maximum of 1 student per season


## Fitness-Related Activities

Fall, Winter, \& Spring seasons; Open to grades 9-12

## ADVANCED FITNESS

Advanced Fitness aims to illustrate our athletic philosophy by developing strong women who succeed at life. Strength builds confidence. Students will engage in free-weight training led by our Strength and Conditioning Coach using barbell, dumbbell, kettlebell, and medicine ball movements. Students will learn the value of consistent work to reach their maximum potential through the techniques of strength training.

Roster Minimum: 4, Roster Maximum: 12

## FITNESS

Students will be introduced to the basics of circuit training, weight training, and cardio training. Students will learn proper form and techniques that will allow them to develop independent workouts.

Roster Minimum: 4, Roster Maximum: 12

## PILATES

Mat-based Pilates class focuses on strength, stability, posture, proper breath control, and flexibility.
Each class will work to balance all muscle groups' strength and flexibility, with an emphasis on challenging the core muscles with each movement. Classes will be taught using slow, controlled movements.

Roster Minimum: 6, Roster Maximum: 14

## YOGA

A mat-based exercise class that uses a system of physical postures, breathing techniques, and meditation derived from Yoga to promote physical and emotional well-being.

Roster Minimum: 6, Roster Maximum: 14

## ZUMBA

A versatile fitness class that combines sixteen core steps using four basic rhythms: salsa, reggae ton, merengue, and cumbia.

Roster Minimum: 6, Roster Maximum: 14

## Interscholastic Team Sports

Fall, Winter, \& Spring seasons; Open to grades 9-12
Madeira competes locally within the Independent School League (ISL) and regionally against other Independent and Public Schools. Students are expected to attend all games and practices, including weekend events. Practice times are typically Monday, Tuesday, Wednesday, Thursday, and Friday from 3:00-4:30 pm for junior varsity teams and 4:00-6:00 pm for varsity teams. Tryouts are open to the entire student body during the pre-season for each sport.

## FALL SEASON

- Cross Country
- Riding
- Varsity and JV Field hockey
- Varsity and JV soccer
- Varsity and JV volleyball
- Varsity and JV tennis


## WINTER SEASON

- Riding
- Varsity and JV basketball
- Varsity Rock Climbing
- Varsity Swimming and Diving


## SPRING SEASON

- Riding
- Varsity and JV Lacrosse
- Varsity Softball
- Varsity Tennis
- Varsity Track and Field
- Varsity Ultimate Frisbee


## RIDING

Fall, Winter, \& Spring seasons;
Open to grades 9-12
Meets Teams requirement
Based on the American Forward Riding System, the program goal is to develop confidence, riding skill, and knowledge of horse care. Supportive instruction is offered to students of all experience levels including those new to the sport. A robust calendar of competitions (including IEA, USEF and schooling shows), clinics and other activities are offered year-round.

- Students are scheduled for two lessons per week between the hours of 3:00 and 6:00.
- Students are required to provide their own helmet, boots and riding pants.
- There is an extra fee charged for the program.
- Students may enroll in riding during their

Co-Curriculum placement but must attend riding lessons during their placement and meet all other attendance requirements.

- Typically, the school's horses have the capacity to safely carry up to 185 pounds.
- Boarding for student's horse is available.

Applications are due May 1st. Please contact imccartney@madeira.org for more information.

- For 11th and 12th graders, if you are a rider and horse owner, you must attend D block during the season you are on Co-Curriculum.


## SELF-DEFENSE/KARATE

Winter season; Open to grades 9-12
While learning the skills necessary for self-protection, students will experience the benefits of increased physical fitness, better mental focus, enhanced self-confidence, and a more placid state of mind. They learn karate techniques utilizing the upper and lower body and learn to strike vital areas with elbows, knees, hands, and feet. Students will also learn how to fall and how to throw others in self-defense situations. The traditions of bowing, wearing the karate uniform (gi), and using special terminology will be practiced in the school (dojo) to create an atmosphere that promotes safety and respect for oneself, for one's classmates, and for the teacher (sensei).

## Skill-Development Activities

Fall, Winter, \& Spring seasons<br>(various depending on activity);<br>Open to grades 9-12

## SWIMMING FOR CONDITIONING

Is geared towards students that are advanced level swimmers or have completed one year on the varsity swim team. This course will cover the four main competitive strokes, turns, and will contain a rigorous workout. This activity requires a student to be able to be in the pool each day (Mon-Fri) of the season.

## Roster Minimum: 6, Roster Maximum: 20

## TENNIS 101

This course introduces and develops the basic skill required to play tennis including the serve, forehand, backhand, volley, overhead and other specialty shots. Students will learn proper tennis etiquette, tennis specific warmup exercises, tennis match scoring, match warm up routines, and basic game strategies designed for recreational tennis match play. Players are required to supply their own racquets and shoes appropriate for tennis courts.

## Roster Minimum: 4, Roster Maximum: 12

## ADVANCED TENNIS

This course develops higher level tennis skills and techniques and assumes players already possess the basic skill sets required for recreational tennis match play. After a review of basic skills, instruction will transition to the mental and physical attributes required to execute winning offensive and defensive strategies for both singles and doubles play.? Drills and practice match play for singles will explore baseline, aggressive baseline, serve and volley, and all-court styles of play. Drills and practice match play for doubles will explore traditional one up/one back, the "I" formation, poaching, and both back styles of play. Players are required to supply their own racquets and shoes appropriate for tennis courts.

Roster Minimum: 4, Roster Maximum: 12

## MAD AQUATICS

This course is geared toward advanced/Varsity level swimmers. This course will be similar in training to our varsity season. This activity requires a student to be able to be in the pool each day (Mon-Fri) of the season and participate in 2-3 weekend competitions in the spring.

Roster Minimum: 4, Roster Maximum: 12


## Learning Retention

This modular schedule-and everything at Madeira-is designed around how girls learn best. Students take three classes at a time, which gives them more time for deep, ambitious learning and a better opportunity to retain what they're learned. With fewer, longer classes, breaks between periods, and time to explore interests and passions, Madeira's modular schedule allows girls to flourish both in and out of the classroom. It's a serious program for girls who are serious about learning-and love having fun in class. All students work with their academic advisors each year to create a personalized schedule.

9TH GRADE SAMPLE SCHEDULE

| MOD 1 | MOD 2 | MOD 3 | MOD 4 | MOD 5 | MOD 6 | MOD 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English I | Biology | Student Llfe I | Biology | English I | English I | Student Llfe I |
| Biology | French I | Global Studies I | French I | Studio Art Painting | Biology | French I |
| Geometry | Studio Art Drawing | STEAM <br> Fundamentals | Geometry | Global Studies I | Geometry | Studio Art Ceramics |
| Volleybally |  |  | Musical |  | Riding |  |

10TH GRADE SAMPLE SCHEDULE

| MOD 1 | MOD 2 | MOD 3 | MOD 4 | MOD 5 | MOD 6 | MOD 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English II | Co-Curriculum <br> 5-Week Internship | Physics | Physics | English II | Global <br> Studies II | English II |
| Physics |  | Spanish II | Global <br> Studies II | Algebra II | Forensic Science | Spanish II |
| Algebra II |  | Algebra II | Photography | Spanish II | Mindfulness \& The Brain | Global <br> Studies II |
| Field Hockey |  | Math/Computer Team |  |  | Riding |  |

## 11TH GRADE SAMPLE SCHEDULE

| MOD 1 | MOD 2 | MOD 3 | MOD 4 | MOD 5 | MOD 6 | MOD 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English III | English III | Chemistry | Chemistry | Acting |  | English I |
| Chemistry | U.S. History | U.S. History | Trigonometry | Latin III | Week | Latin III |
| AP Calculus | Latin III | AP Calculus | Film Production | U.S. History |  | U.S. History |
| eSports |  | Swimming |  |  | Pilates |  |

## 12TH GRADE SAMPLE SCHEDULE

| MOD 1 | MOD 2 |
| :---: | :---: |
| AP Chemistry Ideas In <br> Philosophy | English IV |
| AP Calculus IV |  |
| AP Calculus |  |
| Dance |  |


| MOD 3 | MOD 4 | MOD 5 | MOD 6 | MOD 7 |
| :---: | :---: | :---: | :---: | :---: |
| Capstone Research Seminar |  | AP Chemistry | Global Justice | English IV |
| AP Chemistry | Co-Curriculum <br> 5-Week Internship | French IV | AP Chemistry | French IV |
| English IV |  | AP Calculus | AP Calculus | Studio Art |
|  | Model U.N. |  | Softball |  |

Softball

With 7 Mods a year, my classes stay lively

## MADEIRA DAILY SCHEDULE 2022-23

| TIME | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 8:30 - } \\ & 9: 50 \mathrm{am} \end{aligned}$ | A Block | A Block | A Block | A Block | A Block |
| $\begin{gathered} 10: 00- \\ 10: 35 \mathrm{am} \end{gathered}$ | Advising/ <br> Assembly | Advising/ Assembly | $\begin{aligned} & \text { B Block } \\ & 10-11: 20 \mathrm{am} \end{aligned}$ | Advising/ Assembly | Advising/ Assembly |
| $\begin{gathered} \text { 10:45 am - } \\ \text { 12:05 pm } \end{gathered}$ | B Block | B Block | Lunch | B Block | B Block |
| $\begin{aligned} & \text { 12:05- } \\ & \text { 1:15 pm } \end{aligned}$ | Lunch/Mid-Day Opportunities |  | $\begin{gathered} \text { C Block } \\ \text { 12:30-1:50 pm } \end{gathered}$ | Lunch/Mid-Day Opportunities |  |
| $\begin{gathered} \text { 1:15- } \\ \text { 2:35 pm } \end{gathered}$ | C Block | C Block | $\begin{aligned} & \text { Conference } \\ & \text { Time } \\ & \text { 1:50-2:20 pm } \end{aligned}$ | C Block | C Block |
| $\begin{aligned} & \text { ~2:50 pm } \\ & \text { start* } \end{aligned}$ | D Block | D Block | $\begin{gathered} \text { D Block } \\ \text { 2:30 pm start } \end{gathered}$ | D Block | D Block |
|  | Glee: Monday \& Thursday |  |  |  |  |
| Evening | Chamber Orchestra: Monday \& Wednesday |  |  |  |  |
| Classes | Stagecraft: Wednesday |  |  |  |  |
|  | Engineering/Innovation Lab: Tuesday |  |  |  |  |




# Co-Curriculum Internship Program 

## Placement Process and Timeline

Each year students have progressing levels of choice and independence in their internships: Sophomores rank their preferences among the current placement offerings, juniors indicate policy interests or issue areas and are directed to members of Congress where they can learn more about these policy interests or issues areas, and seniors pursue a placement that matches their passions or career interests. The first step in the placement process is the Academic Office scheduling the mod the student will go to their Co-Curriculum internship. Below you will find a general timeline of the placement process for each grade.

## SOPHOMORE CO-CURRICULUM

Sophomores will complete Co-Curriculum in either Mod 1, 2, 6, or 7.


1 MONTH
BEFORE MOD

2 WEEKS
BEFORE MOD

- Information is sent to students and families about transportation to and from Sophomore placements, mod schedule, attire, and other logistical information about the mod.


## JUNIOR CO-CURRICULUM

Juniors have Co-Curriculum in Mods 2, 3, 4, 5, and 6. In some rare occasions due to scheduling conflicts, juniors may have Co-Curriculum in Mod 7. Junior Co-Curriculum is completed in the same year a student completes U.S. History, typically the junior year, and may not be completed over the summer. Students are matched with offices where they can learn more about their issue area they identified in their U.S. History class.

SPRING AND SUMMER BEFORE 11TH GRADE

## 2 MODS BEFORE

CO-CURRICULUM MOD

1 MOD BEFORE
CO-CURRICULUM MOD

2 WEEKS BEFORE
CO-CURRICULUM MOD

- Co-Curriculum Office explains Junior Placement Process during class meeting.
- Academic Office builds student's schedule, including the mod student will have Co-Curriculum.
- Students with Mod 2 Co-Curriculum start process listed below.
- Students submit most updated resume and indicate issue area.
- Initial placement meeting with Co-Curriculum Office.
- Resume, cover letter, and other application materials reviewed and approved by Co-Curriculum Office.
- Students are paired with an office and submit required application materials.
- Co-Curriculum Office updates students on status of application to an office and notifies students as soon as they are confirmed in an office.
- Students may be asked to interview with potential Congressional Offices.
- If student's applications are not accepted, Co-Curriculum Office will move to subsequent choices.
- Co-Curriculum Office holds training sessions to prepare students for working on Capitol Hill.
- Students and Families receive communication outlining process and some logistical information.
- Information is sent to students and families about transportation to and from Capitol Hill, the mod schedule, attire, and other logistical information about the mod.

NOTE: Students and families may decide to secure an internship using their own network or contacts by notifying the Co-Curriculum Office. We will make sure we do not already have a relationship with that office and will share information about our program that you can give to the office. The Co-Curriculum Office must receive confirmation from the Congressional Office one mod prior to the start of the student's Co-Curriculum mod. If the Co-Curriculum Office has not received confirmation by one mod prior, they will be assigned a placement by the CoCurriculum Office..

## SENIOR CO-CURRICULUM

Seniors have Co-Curriculum in Mods 2, 3, 4, 5, and 6. On rare occasions due to scheduling conflicts, seniors may have Co-Curriculum in Mod 7. The senior year Co-Curriculum internship is an opportunity for students to explore their passions or career interests. The Co-Curriculum Office can help students think about their options and potential internship placements. Seniors have the option of completing their requirement with a Global Internship (outside the vicinity of the Metro Washington, D.C. area) or in the summer between their junior and senior year. Students wishing to have a Global Internship or summer internship must complete a separate application with the Co-Curriculum Office and follow a different timeline, as identified on the application.


- Co-Curriculum Office explains Senior Placement Process during class meeting.
- Academic Office builds student's schedule, including the mod student will have Co-Curriculum.
- Students with Mod 2 Co-Curriculum start process listed below.
- Initial placement meeting with Co-Curriculum Office.
- Co-Curriculum Office identifies Madeira partners that match student interests.
- Co-Curriculum Office researches potential new partners if student interests do not match current partners.
- Resume, cover letter and application materials reviewed and approved by Co-Curriculum Office.
- Students conduct a phone or video interview with potential supervisor.
- If student's applications are not accepted, Co-Curriculum Office will move to subsequent choices.
- Co-Curriculum Office holds an orientation to prepare students for their mod.
- Students and families receive communication outlining process and some logistical information.
- Final placement is confirmed.
- Information is sent to students and families about transportation, the mod schedule, attire, and other logistical information about the mod.
- Students complete any forms and paperwork required by placement.

NOTE: Students and families may select an internship using their own network by notifying the Co-Curriculum Office. If we don't have an existing relationship we will share information about our program that you can provide your contact. The Co-Curriculum Office must receive confirmation from the office one mod prior to the start of the student's Co-Curriculum mod. If the Co-Curriculum Office has not received confirmation by one mod prior, we will assign a placement for the student.

For more information regarding Madeira's Co-Curriculum program, please contact the Co-Curriculum Office by telephone at 703.556.8277 or by email at co-curriculum@madeira.org.


The Madeira School
8328 Georgetown Pike
McLean, Virginia 22102


[^0]:    *International student English is 6 credits and replaces the World Language requirement.
    Placement in the International Student English program is part of the admission decision.

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    Placement in the International Student English program is part of the admission decision.

[^2]:    *International student English is 6 credits and replaces the World Language requirement.

[^3]:    *International student English is 6 credits and replaces the World Language requirement.

