Maine Central Institute

May Term Course Guide 2027

EXPERIENCE

Engagement ··· e**X**ploration ··· **P**assion ··· **E**steem ··· **R**easoning ··· **I**nclusion ··· **E**quity ··· **N**urturing ··· **C**ommunity ··· **E**mpathy



HALF-DAY CLASS OFFERINGS

Advocacy: Mental Health



This course explores mental health awareness, advocacy, and the social impact of stigma on individuals and communities. Students will examine common mental health conditions, misconceptions surrounding mental illness, and the ways stigma affects access to support, treatment, education, and relationships. Through discussions, media analysis, guest speakers, research projects, and community-based activities, students will learn how advocacy can promote understanding, empathy, and positive change. By the end of the course, students will develop practical advocacy skills and create projects aimed at increasing awareness and reducing stigma within their communities.

Pathway(s): Health Sciences

Air Rockets



This course will teach students how to create a small, one-piece air rocket and a multi-piece air rocket. Students will then be challenged to take their knowledge and create a rocket that they feel will be more aerodynamic and can go greater distances when launched.

Pathway(s): Computer Science, Engineering, Math & Science

Art & Storytelling: Bringing Spanish Stories to Life



This course combines Spanish language learning with visual storytelling. Students will explore legends, myths, folktales, poetry, and short stories from Spanish-speaking countries and transform elements of these texts into visual art. Students will read and discuss selected texts in Spanish at an appropriate level, identify characters, settings, themes, symbols, and cultural elements, and create artwork based on their interpretation. They may work with illustration, collage, printmaking, sculpture, or mixed media. As a culminating project, students will create a visual storybook, illustrated narrative, or small exhibition in which the artwork and Spanish text work together to communicate a story to an audience.

Pathway(s): Arts & Humanities, Global Studies, Visual & Performing Arts

Bird Identification & Field Ornithology



In this field-based course, students will learn how to identify local birds by sight and sound and understand how species are tied to specific habitats. Students will practice using binoculars, field guides, and birding apps, and will learn key identification skills such as recognizing shapes, plumage patterns, behaviors, and songs. Daily field sessions at school grounds and nearby habitats will be paired with short lessons on bird ecology, migration, and conservation, culminating in a simple field journal or mini-guide to the common birds of our area. No previous birding experience is needed!!!

Pathway(s): Math & Science, Nature

Book Blogging



This course will give students the chance to read for fun! Students will be encouraged to read books of their choice. Time will be allotted for discussion and a reflective activity will be required for each book. Participants will build stamina by reading for extended periods during class time. There is a minimum reading requirement during the course period.

Pathway(s): Arts & Humanities

Build an Escape Room



In this hands-on, creative course, students will learn how to design and build their own escape room experiences. Students will combine storytelling, problem-solving, psychology, design, communication, and critical thinking to create an immersive experience for others. Students will explore what makes puzzles engaging, how stories can create suspense and atmosphere, and how designers use clues, challenges, and environmental details to guide players through a narrative. Working individually and in teams, students will brainstorm themes, develop storylines, design puzzles, construct props, and test their escape rooms with classmates.

Pathway(s): Arts & Humanities

Business & Personal Finance Math



Business Mathematics is an applied course that explores the mathematical concepts and skills used in business and everyday life. Students will examine topics such as payroll, taxes, insurance, inflation, investments, budgeting, and financial decision-making.

Through hands-on activities, real-world applications, and off-campus learning experiences, students will connect classroom concepts to both the business world and their personal financial lives.

Pathway(s): Business & Marketing, Math & Science

Chapbook Publications



In this immersive half-day course, students will conceptualize, write, and publish an original chapbook of poetry or short fiction paired with visual art. Over the course of the term, students will develop a unifying theme, draft, and revise their creative work, and engage in peer and instructor feedback to refine their pieces. Emphasis will be placed on intentional structure, voice, and the relationship between text and image.

Students will explore the fundamentals of book design, including layout, typography, and cover creation, culminating in the production of a 20-32 page printed chapbook under the MCI Huskies Press imprint. The course will conclude with a celebratory public reading and book signing, giving students the opportunity to share their work with the community and experience the full process of authorship – from idea to publication. Students will each receive 15 copies of their chapbook.

The publication of a chapbook can be submitted to chapbook contests, independent press contests, and as submissions to college writing programs and creative writing department scholarships.

Pathway(s): Arts & Humanities, Business & Marketing

Chess Fundamentals



Classes will revolve around the game of chess and how logic plays a role in piece development, board texture, and strategy. Students will learn how the pieces move, solid chess openings, how to record chess notation, and then develop chess strategies based on the core focus of the game: winning. Different classes will focus on the different parts of the game: Openings, middle game, and end game.

Students will start class off with a learning target, and finish the class applying the new learning target to actual chess games. The class may culminate with hosting a chess tournament for the community.

Pathway(s): Math & Science

Citizens Initiative



Project-based class focused on students developing a strategy to convince a local government (town or state) to implement policy to address a community need.

Pathway(s): Arts & Humanities

Collaborative Storytelling Through RPGs



This class will focus on ways that we use games and roleplay to tell stories. The main thrust of the class would focus on using role playing games (like D&D) to tell stories and explore worlds (real & imaginary). Through this class, students will work through character designs, learn how to use safety tools for storytelling and improv, and work through building stories together.

Pathway(s): Arts & Humanities, Business & Marketing

Crafting Clothing



Students will learn to crochet, knit, or sew a garment using a pattern.

Pathway(s): Arts & Humanities

Credit Recovery: English



This accelerated May Term course provides students with an opportunity to recover previously missed English credits through focused instruction, individualized support, and targeted coursework.

Students will review essential English concepts and demonstrate mastery through assignments, projects, and assessments. Successful completion will allow students to earn the applicable English credit toward graduation.

Pathway(s): Arts & Humanities

Credit Recovery: History



This accelerated May Term course provides students with an opportunity to recover previously missed history credits through focused instruction, individualized support, and targeted coursework. Students will review essential historical concepts and demonstrate mastery through assignments, projects, and assessments. Successful completion will allow students to earn the applicable history credit toward graduation.

Pathway(s): Arts & Humanities

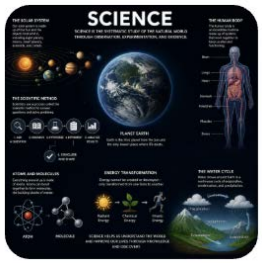
Credit Recovery: Math



This accelerated May Term course provides students with an opportunity to recover previously missed math credits through focused instruction, individualized support, and targeted coursework. Students will review essential math concepts and demonstrate mastery through assignments, projects, and assessments. Successful completion will allow students to earn the applicable math credit toward graduation.

Pathway(s): Math & Science

Credit Recovery: Science



This accelerated May Term course provides students with an opportunity to recover previously missed science credits through focused instruction, individualized support, and targeted coursework. Students will review essential science concepts and demonstrate mastery through assignments, projects, and assessments. Successful completion will allow students to earn the applicable science credit toward graduation.

Pathway(s): Math & Science

Cryptography: The Math of Secret Codes



This course will explore the history, mathematics, and problem-solving behind secret messages and codes. Students will investigate how people have protected information throughout history, from ancient substitution ciphers to more complex encryption methods used today.

Students will use patterns, logic, number theory, and mathematical reasoning to create and break different types of codes. Through puzzles, games, challenges, and creative projects, students will have opportunities to design their own codes, solve encrypted messages, and discover how mathematics can be used to keep information secure.

Pathway(s): Arts & Humanities, Math & Science

Dead Serious: An Introduction to Humor Writing & Comedy



What makes something funny? More importantly, what makes something funny on the page? Dead Serious dives into the mechanics of written comedy, exploring how humor works across three distinct formats: comics and graphic gags, sitcom screenwriting, and stand-up routines. Students will study examples from professional comedians and writers, deconstruct what makes a joke land or fall flat, and then try their hand at each format during in-class writing workshops.

By the end of the ten sessions, every student will have written a mini comic strip, a scene from a sitcom pilot, and a short stand-up set; all performed or shared in an original comedy showcase. No prior writing experience required. Just a willingness to fail funnily.

Pathway(s): Arts & Humanities

Disc Golf



This course will be designed to teach students the sport of disc golf, including, but not limited to: types of throws, types of discs, strategies, and scoring. Students will also analyze games to see where they did well, and where they need to improve. Days will be broken into learning sessions as well as practice sessions which can be specific to one task, or practice in general.

Since MCI currently doesn't have disc golf baskets or a course to play on, part of this class will involve planning and developing an 9 or 18-hole disc golf course for the school. To plan out and develop a disc golf course will require logic, math and engineering skills. We will briefly touch on the history of disc golf: how old the game is, when it started becoming popular, and what the future of disc golf is based on current trends.

Pathway(s): Engineering, Exploration, Nature

Entrepreneur Boot Camp



This course will be an accessible, fast-paced course that walks through the steps of starting a business and selling a product. We will cover defining and/or designing a product, calculating margins, determining overhead costs and securing funding. We would like to have the students develop an e-commerce website and by the conclusion of the term have a functioning online store front that actually sells a product.

This course will be supported through Entrepreneur Club, but one does not need to be in Entrepreneur Club to participate.

Pathway(s): Business & Marketing

Farm to Table: Marketing (Resource English)



This will be a 4-week course available for resource students in all grades. Components of this course will include: writing proposals, advertising / marketing, recipe book creation, communication and reflecting on learning. Differentiated instruction and IEP services for a variety of learner levels and abilities will be incorporated and provided to all styles and learning abilities.

Pathway(s): Business & Marketing, Industry & Trades, Nature

Farm to Table: Math (Resource Math)



This will be a 4-week course available for resource students in all grades. Components of this course will include: marketing, supply / demand, measurement, money, advertisement, calculating total costs, budgeting, return on investment, yield (profit from produce), basic banking. Differentiated instruction and IEP services for a variety of learner levels and abilities will be incorporated and provided to all styles and learning abilities.

Pathway(s): Business & Marketing, Industry & Trades, Nature

Forensic Chemistry



This course will explore a variety of chemistry concepts and skills through the lens of forensic investigation. Students will engage with relevant articles and videos, and conduct laboratory investigations and analysis.

Pathway(s): Industry & Trades, Math & Science

Gamifying the American Constitution



This class provides a role-play approach to the history of the American Revolution, by having students recreate key decisions of the early revolutionary period and interact with those primary sources as if they were alive at the time of the beginning of the period.

Students will be asked to read and analyze sources, and complete short writing assignments (i.e. letters to fellow members of the colonies, petitions to the government, etc.).

Pathway(s): Arts & Humanities

Gardening



Students will learn about the basics of gardening, plants, soil maintenance and pest management. This will be a hands-on class that focuses on revitalizing the student garden behind Manson Hall.

Pathway(s): Nature

Global Social Dances (Ballroom 101) - The Basics of Partner Dance



Students will learn and perform basic swing, basic waltz, and la pizzica. They will participate in lessons that build their movement skills and will work to learn the basic steps of each dance with two variations that they can acquire and then play with as they dance across the floor.

Pathway(s): Arts & Humanities, Global Studies, Visual & Performing Arts

Healthy Eating On a Budget



This interactive class teaches high school students how to make healthy food choices while staying within a budget. Students will learn practical skills for planning balanced meals, shopping smart, reading nutrition labels, and preparing simple, affordable foods that support a healthy lifestyle.

Topics include: Understanding basic nutrition and healthy portion sizes, Meal planning and grocery budgeting, Comparing prices and finding healthy low-cost options, Reading food labels and identifying healthier choices, Preparing quick, nutritious snacks and meals, Reducing food waste and making the most of ingredients, Healthy eating habits for school, sports, and busy schedules.

Through hands-on activities, discussions, and simple food preparation demonstrations, students will gain confidence in making informed food decisions and developing lifelong healthy eating habits without overspending.

Pathway(s): Health Sciences

Historical Art Making Practices & Traditions of Maine



This course will introduce students to Historical Art Making Practices and Traditions of Maine and its relationship to maritime and hunting traditions, and natural material uses and practices. We will create artwork utilizing art making practices related to Scrimshaw (repurposing plastic waste) and Bird Decoys (woodcarving).

Pathway(s): Arts & Humanities, Visual & Performing Arts

History of K-Pop: Music, Culture, and Global Influence



This course will explore how Korean pop music grew from a regional music industry into a worldwide cultural phenomenon. Students will examine the evolution of K-pop from its early influences and first generations of idol groups to the global success of modern artists, while also exploring the role of music, dance, fashion, entertainment companies, fan culture, social media, and technology.

The course will also introduce students to aspects of Korean history and culture and consider how cultural exchange has shaped both K-pop and global popular culture.Through music, videos, discussions, creative activities, and small projects, students will investigate how K-pop has changed over time and what has contributed to its international popularity.

Pathway(s): Arts & Humanities, Global Studies

History of Percussion



This course encourages cultural & historical exploration of percussion construction and composition throughout history. The course could include African drumming, Japanese drumming, Latin drumming, modern band, marching percussion, and other modern forms of percussion. No prior musical experience needed.

Pathway(s): Arts & Humanities, Visual & Performing Arts

How to Not Get Hacked



This course will be an accessible (and very non-technical) introduction into cybersecurity topics. We will discuss the basics of data security with a focus on the human element of any secure system. We will explore threat vectors, and discuss real world examples of data breaches and social engineering tactics. The class will participate in engaging activities such as a Social Engineering Scavenger Hunt. We will also have access to industry experts that can offer information and insight into the current angles of attack for bad actors trying to access/sell user data and/or credentials.

Pathway(s): Computer Science, Math & Science

Intro to Aerospace Engineering



This course introduces students to the field of aerospace engineering through the study of flight, spacecraft, propulsion, aerodynamics, and engineering design. Students will explore how aircraft and spacecraft are developed, tested, and improved while applying principles of physics, mathematics, problem-solving, and teamwork. Hands-on projects, design challenges, and simulations will help students understand real-world aerospace applications.

Pathway(s): Aviation, Engineering, Math & Science

Intro to the Justice System



During this May term class, students will learn about the justice system - particularly courts. We will utilize a “mock trial” format to learn the procedures, roles, and systems of the courtroom. Taking on the roles of attorneys and jurors will help students develop argumentation and reasoning skills while acquainting them with the justice system in Maine.

Pathway(s): Arts & Humanities, Industry & Trades

Jewelry Making Business



This creative jewelry-making class introduces students to the art of designing and crafting unique handmade jewelry using resin, beads, and mixed-media techniques. Participants will learn the fundamentals of working with jewelry resin and create custom earrings, necklaces, bracelets, pendants, and decorative accessories in a fun, hands-on environment.

Students will explore: Resin mixing, pouring, coloring, and curing techniques, Embedding glitter, dried flowers, charms, and decorative elements, Basic beading methods and pattern design, Assembly and finishing techniques for earrings, bracelets, necklaces, and pendants, Jewelry tools, findings, and safety practices, Creative design concepts and personalization. This class is perfect for beginners. By the end of the course, participants will complete several wearable handmade pieces and gain the confidence to continue creating jewelry at home. Exploring the idea of selling at a local craft fair for charity.

Pathway(s): Arts & Humanities, Business & Marketing

Latin American Culture Through Art



This course introduces students to the rich cultural heritage of Latin America through ceramics and visual art. Students will explore the historical and cultural background behind traditional and contemporary artworks from countries such as Mexico, Peru, Costa Rica, and others.

Throughout the course, students will observe and study authentic art pieces from target cultures**.** Students will learn what these objects represent, the societies and traditions that produced them, the materials and techniques used, and the artistic styles and symbols found in the original works. They will develop their own ceramic pieces inspired by the historical objects and artistic traditions studied.

The course will provide a hands-on, creative, and motivating environment where students can explore cultural traditions and develop artistic skills, curiosity, and confidence. The experience will culminate in a "Latin American Cultural Plastic Art Exhibition," where students will display their original artwork and provide short explanations in both Spanish and English.

Pathway(s): Arts & Humanities, Global Studies, Visual & Performing Arts

Lens & Truth: Documentary Filmmaking



Documentaries are one of the most powerful storytelling forms alive today. Lens & Truth takes students on a fast-track journey through the world of non-fiction filmmaking.

Sessions begin with screening and discussing clips from landmark documentaries across genres (nature, social justice, personal essay, sports), examining how filmmakers use interviews, narration, footage, and music to shape a point of view. From there, students move into production: pitching a mini-doc concept, filming short segments on campus and editing a rough cut together. The final session is a screening of everyone's mini-documentaries.

No experience necessary: just curiosity about the world and a story worth telling.

Pathway(s): Arts & Humanities, Business & Marketing

Maine's Outdoor Heritage



This course will be a deep dive into Maine's outdoor heritage, including hunting, fishing, trapping, and foraging.

Pathway(s): Industry & Trades, Nature

Masardis: Reviving our Literary & Art Zine



Masardis literary and fiction zine is back. This course revives a beloved school tradition by producing a new issue of our student-made literary and art zine. This publication features original poetry, fiction, personal essays, and visual art created entirely by students.

Over ten sessions, students will explore the history and spirit of zine culture from photocopied punk manifestos to today's indie publications, workshop other's creative submissions, and make all the editorial and design decisions needed to bring the zine to life.

The final product will be printed and distributed within the school community, creating a tangible artifact of this group's creativity. Whether you write, draw, paint, photograph, or collage, there is a place for your work on Masardis.

Pathway(s): Arts & Humanities, Business & Marketing

Mathematical Structures



Students will build bridges out of spaghetti and hot glue, with the goal being to have it hold the most weight and last the longest.

Pathway(s): Engineering, Math & Science

Mindful Movements: Yoga, Texts, and Journaling for Self-Awareness



In this immersive half-day May Term course, students will be introduced to mindfulness as both a physical and reflective practice. Through yoga sessions, short readings, guided discussion, journaling, and film study, students will explore how tension, breath, movement, and reflection can support focus, emotional awareness, and self-understanding.

The course emphasizes observation over performance and encourages students to build habits of calm, concentration, and thoughtful reflection.

Pathway(s): Arts & Humanities, Health Sciences

Modeling Infectious Diseases



Students will learn the science behind infectious diseases including types of pathogens, virulence factors, and the course of infection. They will also study how epidemics occur and how vaccines can affect the spread. Students will use mathematical models to show how disease spreads as these factors change and learn to create their own model to depict infection rates.

Pathway(s): Health Sciences, Math & Science

Nature Journaling



This will explore the natural sciences through artmaking processes. Class activities will be split between classroom instruction and the exploration of outdoor spaces. Classroom instruction will focus on artmaking practices, discussions on the Natural Sciences, and discussions on the historical importance nature journaling played in the development of scientific disciplines.

Students will utilize various art making processes for creative journaling including but not limited to writing, drawing, collage making, image transfer, and painting. Time spent on nature walks would include plein air art making practices, writing, and guided instruction on topics related to Biology, Ecology and Land Use History.

Pathway(s): Arts & Humanities, Math & Science, Nature, Visual & Performing Arts

Personal Economics Through Table-Top Gaming



This course will teach students basic personal economics through four table-top games: Pay Day, Life, Monopoly and Catan. The students will complete a report that documents what they learned about personal economics through the game play and make connections to their spending, saving and financial planning–or inspire them to be conscientious in these areas.

Pathway(s): Arts & Humanities, Business & Marketing

Pop Culture



In this four-week May Term course, students will examine the influence of pop culture, conspiracy theories, sports, and current events through the lens of mass media. Through discussions, media analysis, and real-world examples, students will explore how news, entertainment, social media, and sports shape public opinion, trends, and cultural identity.

Pathway(s): Arts & Humanities, Exploration

Preparing For Parenting



This course will increase your awareness of “adulting” and a day in the life of a young parent. Students will explore the ins and outs of parenting and gain insight in the following topics: planned parenthood, parenting a newborn, infant/toddler/preschool development, nutrition (planning and making meals for children), community resources and interactions with them, household management and making “toys” with common household items. This course will include in-class discussion, hands on experiences and guest speakers.

Pathway(s): Exploration

Principles of Coaching



Principles of Coaching is an introductory-level course designed for high school students interested in coaching, athletics, leadership, and working with athletes. Students will explore the fundamental principles and responsibilities of effective coaching while developing the knowledge and skills needed to create positive, organized, and successful athletic experiences.

Pathway(s): Arts & Humanities, Exploration

Probability



A deep dive into the topic of probability. Students will learn about different calculations regarding probability and the mathematics required to do those calculations.

Pathway(s): Engineering, Math & Science

Reptile Studies



This course would introduce students to the world of reptiles, including snakes, lizards, turtles, tortoises, and crocodilians. Students will explore reptile anatomy, behavior, habitats, adaptations, evolution, conservation, and the role reptiles play in different ecosystems.

The course will also examine common myths and misconceptions about reptiles, and the challenges reptiles face in the wild. Through research, discussions, hands-on activities, and small projects, students will learn how reptiles survive in a wide variety of environments and why they are an important part of the natural world.

Pathway(s): Math & Science, Nature

Salsa Dancing w/ Hands-On Latin Percussion



Come spice up your routine and learn how to move, groove, and drum to the various styles of Latin music Latin America, Spain, and Portugal. Styles you will become familiar with include: Salsa, Reggaeton, Bachata, Cumbia, and Bossa Nova.

Pathway(s): Arts & Humanities, Global Studies, Visual & Performing Arts

Sports Business & Entertainment



Essential Question: How do sports organizations create memorable fan experiences while successfully managing operations, marketing, media, and entertainment.

Learning Outcomes: Understand sports management and event operations, Create a sports marketing campaign, Develop media and content plans, Learn facility logistics and event staffing, Design entertainment elements for fan engagement, Execute and evaluate a live event Little League “Savannah Bananas Game.”

Pathway(s): Business & Marketing

STEM Algebraic Physics

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

What if algebra actually helped you understand how the world works? In STEM Algebraic Physics, you will use algebra to solve real-world problems involving motion, speed, forces, energy, gravity, machines, and more. You will use math to build, test, measure, predict, and explain how things work. You might build a mouse-trap car, launch a catapult, investigate how objects move, calculate the speed of a moving object, explore the physics of sports, or design solutions to engineering challenges.

No physics background is required! This course is a great choice for students who enjoy hands-on activities, experiments, building things, technology, problem-solving, or figuring out how things work.

Pathway(s): Math & Science

Storytelling Through Game Design



This course will explore the different types of stories that can be told through the medium of video games and virtual reality experiences. Students will step through examples of narratives in interactive media and compare and contrast them to traditional forms of storytelling such as novels, movies and TV shows.

The class will include an introduction to game design and writing for interactive media and will conclude with a collaborative project to create an interactive experience that tells a story in a way that benefits from these new technologies.

Pathway(s): Computer Science, Visual & Performing Arts

Tech For Musical Theatre



Tech for Musical Theatre is a hands-on production course designed for students interested in the behind-the-scenes artistry of musical theatre. Working on the May Term production of The 25th Annual Putnam County Spelling Bee, students will explore the fundamentals of set construction, scenic painting, costume design, props, and backstage production.

Through this collaborative work and real-world theatrical application, students will develop technical theatre skills while helping bring this musical to life. No previous technical theatre experience is required—just creativity, teamwork, and a willingness to learn.

Pathway(s): Arts & Humanities, Visual & Performing Arts

The Local Naturalist



An immersive, hands-on introduction to the natural world right in our backyard. This course focuses on developing practical fieldwork skills, including local bird identification, ethical foraging, foundational land navigation, and flora identification. Students will spend the majority of their time outdoors exploring and comparing distinct local ecosystems to build a connection with their local environment.

Pathway(s): Nature

The Search is On: College Search



This course will discuss the college search and application process from start to finish. Starting with understanding the purpose of college and life goals, we'll dive into ideas surrounding college fit, building a college list, writing the college essay, and showing your best self.

This course will include a short off-campus component by visiting nearby institutions. This course is designed for college bound sophomores and juniors.

Pathway(s): Exploration

TV Production



Lights, Camera, Action! If you love to know what's going on and are interested in journalism and television broadcasting, this is the course for you. Students will create a bi-weekly newscast for the MCI community to be shared on various platforms.

Students will edit, film, interview, and conduct in-depth investigations. Segments include: sports, menu, announcements, interviews & birthdays.

Pathway(s): Arts & Humanities, Visual & Performing Arts

War Battlefields Deep Dive



Analyze and experience life on the battlefield. Includes study of important people, battle tactics, successes, failures, and reenactment of life in camp.

Pathway(s): Arts & Humanities

Weightlifting & Physical Growth



A course designed to teach students the process of weightlifting. It will emphasize safe weightlifting habits, proper gym etiquette and how to correctly grow and improve one's abilities. It will also touch on the importance of rest, hydration and diet.

Pathway(s): Health Sciences, Math & Science

Yearbook



Students will learn about the process of creating the yearbook, practice graphic design, learn some photography and editing, and work on project management skills. The final product of the class would be a Spring Supplement.

Pathway(s): Arts & Humanities, Industry & Trades

FULL DAY CLASS OFFERINGS

Advanced Paddling



Students will learn basic paddling skills with a focus on canoeing. Kayak, and SUP skills may also be introduced. Students may receive an ACA certification.

Pathway(s): Exploration, Nature

Amusement Park Physics



In this course, students would explore many of the classical physics principles and how they play a role in amusement park rides. Topics covered will be Newton's Laws of motion, centripetal force, momentum and impulse, energy transformation, and fluid dynamics.

Students will study the theoretical physics involved in various rides but will also have the opportunity to build and test their own models throughout the course. The capstone experience will involve a day trip to Funtown Splashtown in Saco, Maine.

Pathway(s): Engineering, Math & Science

Anything That Floats



This project-based class would focus on the study of fluid statics and fluid dynamics. Including but not limited to: Archimedes' Principle, Pascal's Principle, Bernoulli's Principle, and Torricelli's Law. Students will explore the history of boat building and will design and test multiple models before their final project.

The capstone project will be for each team of students to design and build a boat that can float in the Sebasticook River. This boat must hold team members as they traverse the river in Manson Park.

Pathway(s): Engineering, Math & Science, Nature

Architectural Drawing/Rendering



Over the course of a session, students will learn one point and two point perspective drawing and ideas of proportion, scale and historic design concepts. They will spend afternoon time creating a large rendering of a building in Pittsfield demonstrating these concepts, and will also redesign a building of their choice in town. The end product will be a small drawing portfolio focused towards 3 dimensional architectural renderings.

Pathway(s): Arts & Humanities, Engineering, Industry & Trades

ELO's For All



Students will learn about the benefits and job opportunities available through ELO participation. ELO's are a critical component of job & career readiness for graduating seniors and rising underclassmen. Exposure to job opportunities helps inform students of fields of study and employment. Students will have the opportunity to earn a full credential.

Pathway(s): Exploration

Environmental Field Methods



In this hands-on May term course, students will learn and apply field methods used by environmental scientists to investigate local ecosystems. Students will design and carry out field studies, collect and analyze data on soil, water, and biodiversity, and use mapping tools to interpret patterns in the local environment. The course emphasizes outdoor, place-based learning, scientific inquiry, and real-world applications such as land-use planning, conservation, and climate resilience.

By the end of the course, students will produce a brief field report or poster that communicates their findings and recommendations for our community.

Pathway(s): Math & Science, Nature

Environmental Science Literature



In this May term course, students will act as environmental storytellers and nature observers, using nature journaling to study local parks and record observations through writing, photography, and collected natural materials. The project addresses the challenge of low environmental awareness and disconnection from the natural world by helping students build a personal understanding of local ecosystems.

Students will take action by documenting their experiences outdoors and transforming them into creative narratives focused on environmental science. The purpose is to promote awareness and responsibility for protecting our environment/planet.

Pathway(s): Arts & Humanities, Math & Science

Explorations Into Criminal Justice



Students will get experience in various areas of criminal justice. Tour the State Crime Lab and Medical Examiners Office in Augusta and the Police Academy and K-9 unit!

Pathway(s): Exploration, Industry & Trades

Explorations of Engineering



Students will spend one day learning about engineering from area professionals and my personal experience. Two or three class days may be spent at UMaine learning about the different engineering departments, the Composite Lab, and the Pulp & Paper Development Center. One class day may be spent at Maine Maritime Academy learning about marine and power systems engineering and exploring the labs.

Pathway(s): Engineering, Math & Science

Fly Fishing



Ready to get outside and learn the art of fly fishing? Join us for hands-on adventures exploring Maine's beautiful rivers, streams, and ponds. Students will learn the basics of fly fishing, including casting techniques, fly selection, knot tying, and understanding the fish and habitats that make Maine's waters so special.

Whether you're a beginner or looking to build your skills, this class is a fun way to spend time outdoors, gain confidence, and enjoy the excitement of fishing in Maine. Grab your gear and get ready to cast!

Pathway(s): Nature

Hiking



Ready to get outside and explore? Join us for an adventure through some of Maine's most beautiful landscapes! Hike new trails, discover fascinating native wildlife and plants, and learn how we can help protect Maine's natural treasures. Whether you love hiking, wildlife, or simply being outdoors, this class is a great way to explore, learn, and have fun. Sign up and discover the wild side of Maine!

Pathway(s): Nature

Intertidal Studies



Students will learn about some of the basic organisms that live in Maine's intertidal and how they are adapted to that environment. They will discuss zonation and ways to safely collect and survey species. They will then spend multiple days exploring different intertidal zones to survey and document organisms.

Pathway(s): Math & Science, Nature

Intro to Archeology



This class aims to provide a foundational understanding of archaeology. It will cover the subject's principles and discuss what archaeology is, why it matters, and how to practice it. The course includes field trips to dig sites and opportunities to meet UMaine college archaeology professors, either in person or via Zoom.

Pathway(s): Arts & Humanities, Nature

Lab Skills



This course will focus on practicing chemistry lab skills that students will use in college that are only touched upon in CP Chemistry. While these skills are practiced in-depth in AP Chemistry and Adv Chem II, this course would be ideal for those who will be taking college chemistry but did not take a second year of high school chemistry.

Pathway(s): Engineering, Math & Science, Health Sciences

Mountain Biking



Students will learn mountain biking skills and have a chance to use those skills on roads, carriage trails and single tracks. Basic bike repair and maintenance will also be incorporated.

Pathway(s): Nature

Musical Theatre Intensive



Step into the spotlight in this exciting two-week immersive musical theatre experience culminating in a fully staged production of The 25th Annual Putnam County Spelling Bee! Designed for performers of all experience and musical ability levels, this fast-paced course invites students to explore acting, singing, movement, character development, ensemble work, and the collaborative process of creating live theatre.

The full day schedule will include: warm-ups with theatre games and vocal work, choreography, and scene study. Students will build confidence both onstage and off while working together to bring this heartfelt and hilarious musical comedy to life. No previous musical theatre experience is required — only enthusiasm, creativity, and a willingness to collaborate.

All musical abilities are welcome. Auditions will be held in early February 2027, with casting based on participation, preparation, and commitment to the rehearsal process. The course concludes with public performances of The 25th Annual Putnam County Spelling Bee for family, friends, and the community.

Pathway(s): Visual & Performing Arts

Service Learning & Leadership



Service Learning and Leadership is a hands-on course designed to empower students to make a meaningful difference in their communities while developing essential leadership skills. Through volunteer service projects, community partnerships, collaboration, and reflection activities, students will explore real-world issues and learn how leadership can create positive social change.

The course emphasizes communication, teamwork, problem-solving, responsibility, and civic engagement as students plan and participate in service experiences that address community needs. By connecting classroom learning with active service, students will grow as compassionate leaders prepared to contribute both locally and globally.

Pathway(s): Exploration

Teachers of the Future



This course prepares high school students who are considering either primary or secondary education as a future career. Students will begin the course by establishing their interest in either primary or secondary education, which will shape the development of their course work. By the end of the class, students will have learned how to develop classroom management skills, how to design lesson plans and a unit plan for their "teacher portfolio," and will have completed an interview with one educator in their life, whether at MCI or in the area. In the second week of the course, students will lead the class with one of their lesson plans.

Pathway(s): Exploration

Your Old House



What stories live within the walls of an old house? In this two-week immersive interdisciplinary course, students will learn how to research the previous owners and occupants of a home while exploring the broader social and historical context of their town as they uncover the hidden lives connected to their homes and buildings within their community.

Participants will use primary archival resources such as letters, photographs, census records, maps, title deeds, newspapers, diaries, guided research, field exploration, and discussion, to transform historical discoveries into original museum theatre pieces designed to bring history to life for an audience. The course will culminate in a public presentation where students will create original scenes to share the untold stories hidden within "Your Old House."

No prior theatre or history experience is required. Students should bring curiosity, creativity, and a willingness to explore the intersection of history, place, and performance.

Pathway(s): Arts & Humanities

PATHWAY BREAKDOWN

SCHOOL OF MATH & SCIENCE (24)

- Air Rockets
- Bird Ident. & Field Ornithology
- Business & Personal Finance Math
- Chess Fundamentals
- Credit Recovery: Math
- Credit Recovery: Science
- Cryptography
- Forensic Chemistry
- How to Not Get Hacked
- Intro to Aerospace Engineering
- Mathematical Structures
- Modeling Infectious Diseases
- Nature Journaling
- Probability
- Reptile Studies
- STEM Algebraic Physics
- Weightlifting & Physical Growth
- Amusement Park Physics [FD]
- Anything That Floats [FD]
- Environmental Field Methods [FD]
- Environmental Science Lit. [FD]
- Explorations of Engineering [FD]
- Intertidal Studies [FD]
- Lab Skills [FD]

SCHOOL OF ARTS & HUMANITIES (35)

- Bringing Spanish Stories to Life
- Book Blogging
- Build an Escape Room
- Chapbook Publications
- Citizens Initiative
- Collab, Storytelling Through RPGs
- Crafting Clothing
- Credit Recovery: English
- Credit Recovery: History
- Cryptography
- Dead Serious (Humor Writing)
- Gamifying the American Constitution
- Global Social Dances
- Hist. Art Practices & Trad. of Maine
- History of K-Pop
- History of Percussion
- Intro to the Justice System
- Jewelry Making Business
- Latin American. Culture Through Art
- Lens & Truth: Docum. Filmmaking
- Masardis: Reviv. Our Lit. & Art Zine
- Mindful Movements
- Nature Journaling
- Personal Econ. through Games
- Pop Culture
- Principles of Coaching
- Salsa Dancing & Latin Percussion
- Tech For Musical Theatre
- TV Production
- War Battlefields Deep Dive
- Yearbook
- Architect.l Drawing/Rendering [FD]
- Environmental Science Lit. [FD]
- Intro to Archeology [FD]
- Your Old House [FD]

SCHOOL OF INDUSTRY & TRADES (8)

- Farm to Table: Marketing (Res. English)
- Farm to Table: Math (Resource Math)
- Forensic Chemistry
- Intro to the Justice System
- Maine's Outdoor Heritage
- Yearbook
- Architectural Drawing/Rendering [FD
- Explorations Into Criminal Justice [FD]

SCHOOL OF NATURE (17)

- Bird Identification & Field Ornithology
- Disc Golf
- Farm to Table: Marketing (Res. English)
- Farm to Table: Math (Resource Math)
- Gardening
- Maine's Outdoor Heritage
- Nature Journaling
- Reptile Studies
- The Local Naturalist
- Advanced Paddling [FD]
- Anything That Floats [FD]
- Environmental Field Methods [FD]
- Fly Fishing [FD]
- Hiking [FD]
- Intertidal Studies [FD]
- Intro to Archeology [FD]
- Mountain Biking [FD]

SCHOOL OF ENGINEERING & TECHNOLOGY (10)

- Air Rockets
- Disc Golf
- Intro to Aerospace Engineering
- Mathematical Structures
- Probability
- Amusement Park Physics [FD]
- Anything That Floats [FD]
- Architectural Drawing/Rendering [FD]
- Explorations of Engineering [FD]
- Lab Skills [FD]

AVIATION PATHWAY (1)

- Intro to Aerospace Engineering

BUSINESS & MARKETING PATHWAY (11)

- Business & Personal Finance Math
- Chapbook Publications
- Collab. Storytelling Through RPGs
- Entrepreneur Boot Camp
- Farm to Table: Marketing (Res. English)
- Farm to Table: Math (Resource Math)
- Jewelry Making Business
- Lens & Truth: Docum. Filmmaking
- Masardis: Reviving our Lit. & Art Zine
- Personal Economics Through Table-Top Gaming
- Sports Business & Entertainment

COMPUTER SCIENCE & AI PATHWAY (3)

- Air Rockets
- How to Not Get Hacked
- Storytelling Through Game Design

EXPLORATION PATHWAY(10)

- Disc Golf
- Pop Culture
- Preparing For Parenting
- Principles of Coaching
- The Search is On: College Search
- Advanced Paddling [FD]
- ELO's For All [FD]
- Explorations Into Criminal Justice [FD]
- Service Learning & Leadership [FD]
- Teachers of the Future [FD]

GLOBAL STUDIES PATHWAY (5)

- Art & Storytelling: Bringing Spanish Stories to Life
- Global Social Dances (Ballroom 101)
- History of K-Pop
- Latin American Culture Through Art
- Salsa Dancing w/Latin Percussion

HEALTH SCIENCES PATHWAY (6)

- Advocacy: Mental Health
- Healthy Eating on a Budget
- Mindful Movements
- Modeling Infectious Diseases
- Weightlifting & Physical Growth
- Lab Skills [FD]

VISUAL & PERFORMING ARTS PATHWAY (11)

- Bringing Spanish Stories to Life
- Global Social Dances (Ballroom 101)
- Hist. Art Practices & Trad. of Maine
- History of Percussion
- Latin American Culture Through Art
- Nature Journaling
- Salsa Dancing w/Latin Percussion
- Storytelling Through Game Design
- Tech For Musical Theatre
- TV Production
- Musical Theatre Intensive [FD]