

# Maine Central Institute

## Course Catalog

2024-2025



# TABLE OF CONTENTS

<b>2024-2025 Course Offerings</b>	<b>7</b>
<b>MCI Graduation Requirements</b>	<b>8</b>
Traditional Diploma	8
Recommended 9th Grade Courses	8
Recommended 10th Grade Courses	8
Recommended 11th Grade Courses	8
Recommended 12th Grade Courses	8
<b>International Student Curriculum Policy</b>	<b>9</b>
<b>Humanities</b>	
Foundations (Freshman English Seminar)	<b>10</b>
Foundations (Freshman History Seminar)	10
World Studies & Global Issues (Sophomore English Seminar)	<b>11</b>
World Studies & Global Issues (Sophomore History Seminar)	11
Civic Engagement & the Founding of America (Junior English Seminar)	11
Civic Engagement & The Founding of America (Junior History Seminar)	11
Beyond the Bell (Senior English Seminar/Senior Project)	<b>12</b>
<b><i>Pathways Courses</i></b>	
Creative Writing/CP	12
Film Studies/CP	12
Personal Finance/CP	12
Maine Studies/CP	<b>13</b>
American Hero/CP	13
Sports Journalism & Marketing Workshop/CP	13
Design Heritage & Modern Consumerism/CP	13
Model UN/CP	<b>14</b>
Soft Skills for Agency & Social Ease/CP	14
Native American Studies/CP	14
War. What Is It Good For?/CP	14
Modern Poetry/CP	<b>15</b>
Human Geography & Ecology/CP	15
Fallout/CP	15
Family Dynamics/CP	15
Law & Criminology in the US/CP	<b>16</b>
US & Them: Modern Global Issues/CP	16
The Culture of Madness/CP	16
Leadership in the Professional Domain/CP	16
Architects Of The Future/CP	<b>17</b>
Death & Dying/CP	17
History On The Big Screen/CP	17
Business & Economic Literacy/CP	17
Psychology/CP	<b>18</b>
Sociology/CP	18
Introduction to Philosophy/CP	18



College Composition (UMFK)/CE	18
<b>Humanities AP Courses</b>	
AP English Language & Composition	19
AP English Literature & Composition	19
AP United States History	19
AP US Government & Politics	19
<b>English for Speakers of Other Languages (ESL/ESOL)</b>	
ESOL Integrated Skills I	20
ESOL Integrated Skills II	20
ESOL US History	20
ESOL Advanced Academic Writing	20
<b>Extended Learning Opportunities</b>	
ELO's	21
<b>Mathematics</b>	
Pre-Algebra	21
Algebra IA & Data Analysis/CP	21
Geometry B/CP	22
Algebra IB/CP	22
Geometry & Probability	22
Geometry & Probability/CP	22
Algebra II	23
Algebra II/CP	23
College Algebra (UMFK)/CE	23
Introduction to Data Science	23
Pre-Calculus/CP	24
Advanced Placement (AP®) Pre-Calculus	24
Advanced Placement (AP®) Calculus AB	24
Advanced Placement (AP®) Calculus BC	24
Advanced Placement (AP®) Statistics	25
Business Math	25
Accounting	25
<b>Science</b>	
Earth and Space Science	26
Earth and Space Science/CP	26
Biology	26
Biology/CP	26
Advanced Placement (AP®) Biology	27
Chemistry/CP	27
Advanced Placement (AP®) Chemistry	27
Physics/CP	27
Advanced Placement (AP®) Physics I	28
Advanced Placement (AP®) Physics II	28
Advanced Anatomy & Physiology (with UMFK CE option)	28

Environmental Science	28
Advanced Placement (AP®) Environmental Science	<b>29</b>
Sustainable Living	29
Botany	29
Laboratory Science: Wildlife Forensics	29
Forensic Science	<b>30</b>
Astronomy	30
<b>Technology and Engineering</b>	
Introduction to Design	30
Introduction to Engineering	<b>31</b>
Physics in Sports	31
Advanced Design	31
Mechanical Engineering	31
Computer Applications	<b>32</b>
Robotics	32
Project Management	32
<b>Human Development</b>	
Health I	<b>33</b>
Physical Education I	33
Physical Education II	33
Physical Education III	33
Introduction to Medical Concepts	<b>34</b>
Introduction to Sports Medicine	34
Jobs for Maine's Graduates (JMG)	34
Outside Maine	34
<b>Visual and Performing Arts</b>	
<i>Art</i>	
Studio Foundations I	<b>35</b>
Studio Foundations II	35
Ceramics	35
Pottery	<b>36</b>
Drawing	36
Painting	36
Discovering Art History	36
<i>Drama</i>	
Technical Theatre I	<b>37</b>
Technical Theatre II / III / Advanced	37
Stage and TV Makeup I	37
Stage and TV Makeup II	37
Social Theater	<b>38</b>
Actors Studio I	38
Introduction to Costume Design	38
Play Production	38
Festival Theatre Ensemble	<b>39</b>

## ***Music***

Concert Band	39
Concert Choir	39
Instrumental Jazz Ensemble	39
Vocal Jazz Ensemble	<b>40</b>
Guitar I	40
Guitar II	40
Ukulele	40
Piano I	<b>41</b>
Piano II	41
Music Theory & Composition / Digital Music	41
Modern Band	41

## ***Ballet***

Bossov Ballet	<b>42</b>
---------------	-----------

## **World Languages**

French I/CP	42
French II/CP	42
French III/CP	<b>43</b>
French IVCP	43
Italian I/CP	43
Spanish I/CP	<b>44</b>
Spanish II/CP	44
Spanish III/CP	44
Spanish IV/CP	44

## **Other Electives**

Teaching and Research Assistants	<b>45</b>
HPER	45

## **Dual / Concurrent Enrollment Courses**

College Composition (UMFK)/CE (in-person)	45
Introduction to Literature/DE (online)	45
Principles of Economics I (Macro)/DE (online)	<b>46</b>
Principles of Economics II (Micro)/DE (online)	46
Psychology/DE (online)	46
Sociology/DE (online)	46
Quantitative Reasoning/DE (online)	<b>47</b>
Technical Math/DE (online)	47
Anatomy & Physiology (UMFK)/CE (in-person)	47
College Algebra (UMFK)/CE (in-person)	47
Aviation/DE (online)	<b>48</b>

## **AP4ME Courses (online)**

AP Art History	48
AP Biology	48
AP Calculus BC	<b>49</b>
AP Computer Science A	49

AP English Language & Composition	49
AP Environmental Science	49
AP European History	<b>50</b>
AP Human Geography	50
AP Macroeconomics	50
AP Music Theory	50
AP Psychology	<b>51</b>
AP Spanish Language & Culture	51
AP Statistics	51
AP US Government & Politics	51
AP US History	<b>52</b>
AP World History	52

#### **Somerset Career and Technology Center (SCTC)**

Automotive Technology I & II	52
Certified Nursing Assistant	52
Commercial Truck Driving	<b>53</b>
Cooperative Education	53
Culinary I & II	53
Digital Graphics I & II	53
Early Childhood Education	<b>54</b>
Electrical Construction I & II	54
Emergency Medical Technician	54
Pre-Engineering	54
Residential Construction	<b>55</b>
Welding	55



# 2024 - 2025 COURSE OFFERINGS

## HUMANITIES

Foundations English Seminar (EN)  
Foundations History Seminar (H)  
World Studies & Global Issues  
English Seminar (EN)  
World Studies & Global Issue  
History Seminar (H)  
Civic Engagement & The Founding  
of America English Seminar (EN)  
Civic Engagement & The Founding  
of America History Seminar (H)  
Beyond the Bell English Seminar  
(EN)

## HUMANITIES PATHWAYS COURSES

Creative Writing/CP (EN)  
Film Studies/CP (EN)  
Personal Finance/CP (SS)  
Maine Studies/CP (SS)  
American Hero/CP (EN)  
Sports Journalism & Marketing  
Workshop/CP (EN)  
Design Heritage & Modern  
Consumerism/CP (EN)  
Model UN/CP (SS)  
Soft Skills for Agency & Social  
Ease/CP (SS)  
Native American Studies/CP (SS)  
War. What is it Good For?/CP (SS)  
Modern Poetry/CP (EN)  
Human Geography & Ecology (SS)  
Fallout/CP (EN)  
Family Dynamics/CP (EN)  
Law & Criminology in the US/CP  
(SS)  
US & Them: Modern Global  
Issues/CP (SS)  
The Culture of Madness/CP (EN)  
Leadership in the Professional  
Domain/CP (EN)  
Architects of the Future/CP (EN)  
Death & Dying/CP (SS)  
History on the Big Screen/CP (SS)  
Business & Economic Literacy/CP  
(SS)

Psychology/CP (SS)  
Sociology/CP (SS)  
Introduction to Philosophy/CP (SS)  
College Composition / CE (EN)

## HUMANITIES AP COURSES

AP Language & Composition (EN)  
AP Literature & Composition (EN)  
AP US History (SS)  
AP US Government & Politics (SS)

## ESOL

ESOL Integrated Skills I (EN)  
ESOL Integrated Skills II (EN)  
ESOL US History I (SS)  
ESOL Advanced Academic Writing  
(EN)

## MATHEMATICS

Pre-Algebra (M)  
Algebra I & Data Analysis/CP (M)  
Geometry B & Probability/CP (M)  
Algebra IB & Data Analysis/CP (M)  
Geometry & Probability (M)  
Geometry & Probability/CP (M)  
Algebra II (M)  
Algebra II/CP (M)  
College Algebra / CE (M)  
Intro to Data Science (M)  
Pre-Calculus/CP (M)  
AP Pre-Calculus (M)  
AP Calculus AB (M)  
AP Calculus BC (M)  
AP Statistics (M)  
Business Math (M)  
Accounting (M/EL)

## SCIENCE

Earth & Space Science (S)  
Earth & Space Science/CP (S)  
Biology (S)  
Biology/CP (S)  
AP Biology (S/EL)  
Chemistry/CP (S)  
AP Chemistry (S/EL)  
Physics/CP (S/EL)

AP Physics I (S/EL)  
AP Physics II (S/EL)  
Adv. Anatomy & Physiology / CE  
Option (S/EL)  
Environmental Science (S/EL)  
AP Environmental Science (S/EL)  
Sustainable Living (S/EL)  
Botany (S/EL)  
Wildlife Forensics (S/EL)  
Forensic Science (S/EL)  
Astronomy (S/EL)

## TECHNOLOGY & ENGINEERING

Intro to Design (S/E/T/FA)  
Intro to Engineering (S/E/T)  
Physics in Sports (S/E/T)  
Advanced Design (S/E/T/FA)  
Mechanical Engineering (S/E/T)  
Computer Applications (S/T)  
Robotics (S/E/T)  
Project Management (T/E)

## HUMAN DEVELOPMENT

Health I (HE)  
PE 1 (PE)  
PE 2 (PE)  
PE 3 (PE/EL)  
Intro to Medical Concepts (S/E)  
Intro to Sports Medicine (EL)  
OutdoorME (EL)  
JMG 9, 10, 11, 12 (EL)

## VISUAL & PERFORMING ARTS

Studio Foundations I (FA)  
Studio Foundations II (FA)  
Ceramics (FA)  
Pottery (FA)  
Drawing (FA)  
Painting (FA)  
Discovering Art History (FA)  
Tech Theatre I (FA)  
Tech Theatre II (FA)  
Tech Theatre III/Adv. Tech Theatre  
(FA)

Stage/TV Makeup I (FA)  
Stage/TV Makeup II (FA)  
Social Theatre (FA)  
Actor's Studio I (FA)  
Intro to Costume Design (FA)  
Play Production (FA)  
Festival Theatre Ensemble (FA)  
Concert Band (FA)  
Concert Choir (FA)  
Instrumental Jazz Ensemble (FA)  
Vocal Jazz Ensemble (FA)  
Guitar I (FA)  
Guitar II (FA)  
Ukulele (FA)  
Piano I (FA)  
Piano II (FA)  
Modern Band (FA)  
Music Theory & Comp / Digital  
Music (FA)  
Bosssov Ballet (FA)

## WORLD LANGUAGES

French I/CP (WL)  
French II/CP (WL)  
French III/CP (WL)  
French IV/CP (WL)  
Italian I/CP (WL)  
Spanish I/CP (WL)  
Spanish II/CP (WL)  
Spanish III/CP (WL)  
Spanish IV/CP (WL)

## OTHER ELECTIVES

Teaching Assistant<sup>1</sup> (E)

## DUAL ENROLLMENT

*\*Courses offered through  
ExploreEC, OnCourse & Husson  
ECAP*

## AP4ME

*See Course Catalog*

## SCTC COURSES

*See course catalog*

### Note:

All students must enroll for a minimum of six (6) academic credit courses each semester.

### \*Dual Enrollment / Concurrent Enrollment options:

- Juniors and Seniors are eligible for Dual Enrollment/Concurrent Enrollment courses through the University of Maine System, Community College System, and Husson University. Students may be eligible to take up to 12 college credit hours per year for free.
- Students will still be required to enroll in a minimum of 4 MCI courses each semester and complete a Manson Essay and Senior Project.
- Out-of-state or international students will be required to pay a reduced college/university tuition rate for each course through Maine Public Universities & Community Colleges. Students may be eligible to take up to 12 college credit hours per year through Husson University's ECAP program for free.

### Credits Earned Legend:

EN = English	HE = Health
SS = Social Science	PE = Physical Education
M = Math	FA = Fine Art
S = Science	WL = World Language
T = Technology	EL = Elective
E = Engineering	

### ACADEMIC COUNSELORS

Mr. Cody Campbell, [ccampbell@mci-school.org](mailto:ccampbell@mci-school.org)

Mrs. Pamela Smith, [psmith@mci-school.org](mailto:psmith@mci-school.org)

### DEAN OF ACADEMICS

Mr. Scott J. Giallombardo, [sgiallombardo@mci-school.org](mailto:sgiallombardo@mci-school.org)

### REGISTRAR

Mrs. Kirsten Pomeroy, [kpomeroy@mci-school.org](mailto:kpomeroy@mci-school.org)

# MCI Graduation Requirements

## Traditional Diploma

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
3 Science Credits  
3 Mathematics Credits  
2 Fine Art Credit  
1 PE Credit  
0.5 Health Credit  
0.5 Technology Credit  
6 Elective Credits from any discipline  
*2 World Language Credits (recommended)*

## School of Math & Science

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
4 Science Credits  
4 Mathematics Credits  
1 Fine Arts Credit  
1 PE Credit  
0.5 Health Credit  
0.5 Technology Credit  
6 Elective Credits from any discipline  
*2 World Language Credits (recommended)*

## School of Arts & Humanities

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
3 Science Credits  
3 Math Credits  
2 Fine Arts Credits  
1 PE Credit  
0.5 Health Credit  
0.5 Technology Credit  
2 World Language Credits (required)  
5 Elective Credits from any discipline

## 1 Year Experience

1 English  
1 Social Science  
1 Science  
1 Math  
2 Electives  
8

## School of Industry & Trades

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
3 Science Credits  
3 Math Credits  
1 Fine Arts Credit  
1 PE Credit  
0.5 Health Credit  
0.5 Technology Credit  
4 Hands-on Learning Credits  
4 Elective Credits from any discipline

## School of Nature

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
4 Science Credits  
3 Math Credits  
1 Fine Arts Credit  
1.5 PE Credit  
0.5 Health Credit  
0.5 Technology Credit  
6.5 Elective Credits from any discipline  
*2 World Language Credits (recommended)*

## School of Engineering

4 English Credits  
2 Social Science Credits  
1 US History & Civics Credit  
5 Science Credits  
4 Math Credits  
1 Fine Arts Credit  
1 PE Credit  
0.5 Health Credit  
0.5 Computer Science Credit  
5 Elective Credits from any discipline  
*2 World Language Credits (recommended)*

CP: College Preparatory courses  
AP: Advanced Placement courses offered through College Board  
CE: Concurrent Enrollment courses offered through MCI & UMFK  
DE: Dual Enrollment offered through the University of Maine, Husson University, and Kennebec Valley Community College  
SCTC: Somerset Career & Technical Center  
Core: English, History, Math, Science courses  
Non-Core: Fine Arts, Computer Science, World Language, PE, Health

## International Student Curriculum Policy

MCI enjoys a high reputation for preparing international students for success at American universities. International students should use these guidelines to help plan their courses with his or her college counselor at MCI. The Academic and Admission Office staff will provide the final recommendation based on previous grades and earned credits. The students will also need to fulfill the community service and co-curricular requirements.

The following graduation plan is used for all international students at MCI:

### **4 year plan: Grade level 9**

Students will be expected to follow the Graduation Requirements for students graduating from MCI.

### **3 year plan: Grade level 10\***

3 credits in English, 3 credits in math, 3 credits in science (including one lab), 2 credits in history (including U.S. History), 1 fine art credit, 1 physical education credit, 1/2 credit in health, completion of the Manson Essay and Senior Project. A minimum of seven classes must be taken each semester, and eighteen (18) credits must be completed at MCI in order to graduate.

### **2 year plan: Grade level 11\***

2 years of English, 2 credits in math, 2 credits in science (including one lab), 1 credit in history (including U.S. History), 1 fine art credit, 1/2 physical education credit, 1/2 credit in health, completion of the Manson Essay and Senior Project. A minimum of seven classes must be taken each semester, and fourteen (14) credits must be completed at MCI in order to graduate.

### **1 year plan - grade level 12\***

One-year seniors and post-grads design individual academic programs with counselors in consultation with the Dean of Academics. The program will reflect consideration of the subjects studied at previous schools, the student's English proficiency, college admission requirements and the desirable breadth and depth of study. Required courses will include English (including completion of the Senior Project), social science, math, science (lab science if no previous lab courses have been taken), and electives to total the seven classes per semester minimum.

GPA will be calculated based on courses taken at MCI and other US high schools for international students. Class rank is awarded only after the completion of a minimum of three semesters at MCI. International students are eligible for any honors, advanced placement, or college courses as long as the prerequisites are satisfied.

**\*The Dean of Academics and ESL department may choose to design individual academic programs for students with intensive ESL needs.**



# MCI COURSE DESCRIPTIONS

2024-2025

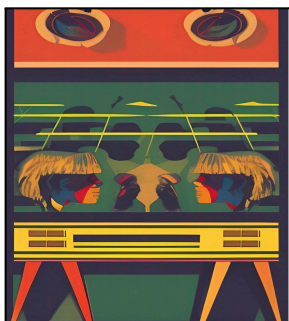
## Humanities

The Humanities curriculum was created with a grant from the National Endowment for the Humanities in 1982. The mission of MCI Humanities is to prepare students to be thinking members of a complex society who explore the human condition through interdisciplinary, rigorous, contextual discourse to achieve professional and personal goals and a sense of well-being while fostering sustainable and just societies. Students are required to demonstrate, both orally and in writing, a developmentally appropriate ability to analyze, synthesize, evaluate, and integrate historical, textual, and social science knowledge. All students are required to take notes, discuss cooperatively, debate, create, interact with media and technology, and present. Humanities courses are semester-long, and they each earn a half credit; AP courses are year-long and earn one credit. Students are expected to earn a minimum of four English and three History credits in order to fulfill graduation requirements.

## Required Seminars

Freshmen, sophomores, and juniors will take a semester English and history course each year. There will be one capstone assessment per year: Service Learning Project (shared in freshman English and history seminars), Community History Project (in the sophomore history seminar), The Manson Essay (in the junior English seminar), and the capstone project is the Senior Project, which can occur in either semester (Spring or Fall) in the Beyond the Bell Senior Seminar.

### Foundations of English Seminar / CP - 2300 / H - 23001 (Freshman English Seminar)



This required CP level freshman English seminar course is designed to be an introduction to high school literacy expectations, English language and rhetorical skills, reading and writing for various purposes, and Humanities best practices. Utilizing a thematic curriculum design, students will study a range of topics, connecting ancient texts from early civilizations to modern trends and practices accessed through current event articles, social sciences, and the arts. **This will only be offered in the fall semester**, and it will overlap with the freshman history seminar in content, and skills. With permission from the instructor, students may opt for Honors credit in this course by Honors-level classroom leadership and performance, completing extra reading and writing assignments in addition to regular classwork, and attending discussion groups outside of class. **For freshmen. (.5 English credit)**

### Foundations of History Seminar / CP - 2400 / H - 24001 (Freshman History Seminar)



This required CP level freshman seminar History course will provide students beginning high school with a social science and history foundation for future study. Students will understand the features of civilization, gain a basic outline of world religions and culture, and focus on physical geography knowledge and map skills. **This will only be offered in the fall semester**, and it will overlap with the freshman English seminar in content and skills. With permission from the instructor, students may opt for Honors credit in this course by Honors-level classroom leadership and performance, completing extra reading and writing assignments in addition to regular classwork, and attending discussion groups outside of class. **For freshmen. (.5 Social Science credit)**

## World Studies & Global Issues English Seminar / CP - 2307 / H - 23007 (Sophomore English Seminar)



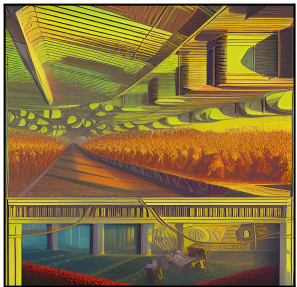
In this semester-long, required CP English course, students will analyze themes such as love, identity, power, conflict, peace, security, modern culture, equality, and inequality by studying diverse cultures, perspectives, and narratives through world literature ranging from the Renaissance to modern times. This course will offer students an understanding of the human experience across different societies and time periods by delving into the historical and cultural contexts that shape the literature of different regions, enhancing comprehension and appreciation. Students will develop critical thinking skills through close reading, interpretation, and evaluation of texts. Special focus will be the impact of rhetoric and applying research and citation strategies in narrative and argument pieces. With permission from the instructor, students may opt for Honors credit in this course by Honors-level classroom leadership and performance, completing extra reading and writing assignments in addition to regular classwork, and attending discussion groups outside of class. This course will be offered in both the fall and spring semesters and is **for sophomores**. (.5 English credit)

## World Studies & Global Issues History Seminar / CP - 2401 / H - 24001 (Sophomore History Seminar)



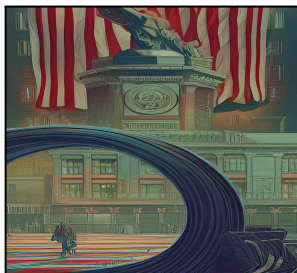
In this **required** sophomore history course students will further align the humanities skills of argument and critical thinking with social science topics connecting to the themes of conflict, peace, security, modern culture, identity, equality and inequality. Special focus will be the impact of the 19th and 20th century on the modern world. With permission from the instructor, students may opt for Honors credit in this course by Honors-level classroom leadership and performance, completing extra reading and writing assignments in addition to regular classwork, and attending discussion groups outside of class. This course will be offered in both the fall and spring semesters, and is **for sophomores**. (.5 Social Science credit)

## Civic Engagement & The Founding of America English Seminar / CP - 2308 (Junior English Seminar)



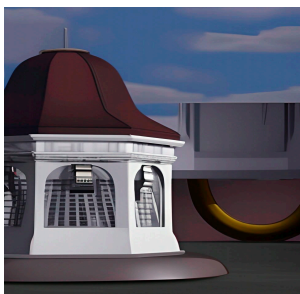
This is the **required** junior English seminar. In this CP course students will read and study texts and scenarios that outline the birth of the US and its government, challenges to individual and collective freedoms and wellbeing, and actions toward improving or resolving these issues of concern. **The Manson Essay, a required assessment for an MCI diploma, will be the capstone project** for this course requiring students to research an important civic concern, write a synthesis essay with citations, and deliver these findings in a speech. This course will be offered in both the fall and spring semesters and is **for juniors**. (.5 English credit)

## Civic Engagement & The Founding of American History Seminar / CP - 2402 (Junior History Seminar)



This is the **required** junior history seminar. In this CP-level course students will study the events that led up to and formation of the US government, its constitution, and the rights and responsibilities of citizenship. Students will gain political knowledge, identify social norms and values, and define civic behavior responsibilities for both individuals and groups to sustain our democratic republic. This course will be offered in both the fall and spring semesters, and is **for juniors**. (.5 Social Science credit)

## Beyond The Bell English Seminar / CP - 2329 (Senior English Seminar/Senior Project)

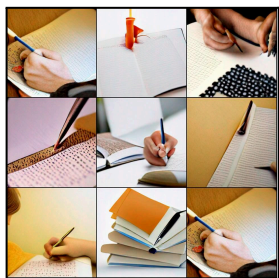


This is the **required** senior English seminar. In this course, students will focus on building skills and competencies for their futures beyond MCI. The first quarter will include topics such as college and career writing, the college essay/personal memoir, preparing a resume, writing a cover letter, mock interviews, career/college planning (scholarships/grants), and professional media/social media profile creation. The second quarter will be devoted to a 50-hour **senior project** that will require students to collaborate outside MCI in the professional domain and hone communication skills. Passing the senior project is a graduation requirement. This course will be offered in both the fall and spring semesters and is **for seniors**. (.5 English credit)

### Pathways Courses

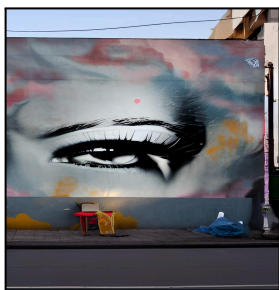
These semester courses are more specialized by theme and based on student choice. Utilizing an interdisciplinary approach, the content will integrate topics outside the Humanities disciplines to earn English and history credits as indicated; however, these disciplines will remain the focal points to build upon the Humanities skills and knowledge laid out in the seminars.

## Creative Writing / CP - 182



This CP English class is designed to provide an overview of creative writing, and is specifically focused on short stories and poetry. Using children's books, young adult novels, short stories, and poetry as mentor texts, students will learn the various elements of a story and then implement those techniques and skills into their own writing. Students will engage in group writing, in-class exercises, workshops, and peer review. These are a few of the elements of creative writing studied and practiced in this class: characterization, figurative language, perspective, plot, setting, voice, and word choice. **Open to all students**. (.5 English credit)

## Film Studies / CP - 986



This CP English course encourages students to explore films as texts. As a medium of presentation, films convey narrative and employ many of the same elements of literature and art in a beautiful combination that is enhanced by the dramatic performance and functional form and style. The artistic construction can be appreciated along the lines of its individual elements as well as its original medium. This course will involve various activities to explore film techniques and analysis of films, create original films, and enjoy watching films as a classroom community. **Open to all students**. (.5 English credit)

## Personal Finance / CP - 239



This CP History course will be focused on the financial literacy of the individual, preparing people for basic life events such as finding and applying for a job, managing a budget, buying a house, and planning for retirement. Students will focus on factors that go into deciding on careers, managing household finances (paying for rent, mortgages, managing debt, etc.), and buying and selling assets such as stocks and bonds. We will also dedicate a portion of the class to paying for college. **Open to all students**. (.5 Social Science credit)





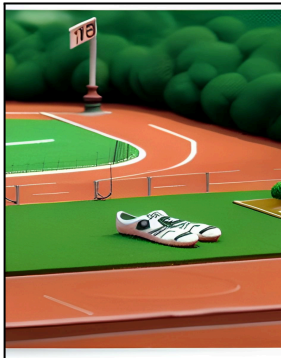
*Learn all about our magnificent and multifaceted home in this CP-level semester course focused on the history, literature, art, and lifestyle of the greatest state in the union. Maine subjects will include statehood facts, war connections, Native American tribes, Maine industries such as tourism, pulp and paper, and fishing, Maine parks, natural resources, protected lands, ATVing, wildlife management, Maine norms and laws, and current events. **Open to all students. (.5 Social Science credit)***

## American Hero / CP - 2313



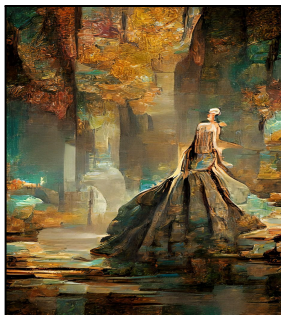
*This CP American Studies Humanities course focuses on the ever-changing tastes and functions of hero literature in American history. Students will explore diverse media related to hero stories including novels, comics, films, and games. This course will explore themes in literature, American history, psychology, and sociology. Students will explore how and why we craft hero stories, examine the changing tastes and styles of American popular and political culture, and examine dramaturgical aspects of storytelling. Typical assessments include reading responses, film critique, independent and collaborative storytelling through poetry, prose, art, and games. **Open to freshmen and sophomores. (.5 Social Science credit)***

## Sports Journalism & Marketing Workshop / CP - 2325



*In this CP-level semester English course, students will study the principles of sports writing, learning to develop voice, pacing, tension, and movement, and continue to explore such elements as perspective and imagery, while implementing first-hand and historical research. This course delves into the dynamic world of sports media through a unique lens that combines journalistic skills with marketing strategies. This course aims to equip students with the knowledge and practical skills needed to excel in sports journalism while understanding the crucial role of marketing and strategy in the sports industry. Students will study modern sports journalism through articles, nonfiction texts, documentaries, podcasts, and broadcast journalism. In addition to writing their own pieces, students will critically read, discuss, and respond to published sports writing and the articles of other students. Students will report on local sporting events. **Open to all students. (.5 English credit)***

## Design Heritage & Modern Consumerism / CP - 2311



*This semester CP English course will examine history, culture, and economy through the lens of fashion and design (clothing, architecture, technology) and the purchase of goods and services related to it. This course will utilize articles in Vogue, Architectural Digest, and other major fashion publications, advertising and marketing strategies, sociology and psychology studies associated with fashion, fashion trends through the years, analyses of how design relates to consumerism, geographical studies with respect to fashion and architecture, human rights violations regarding consumption: trends and corporations, principles of design, sustainability concepts, festivals in Europe as seed of fashion industry, notable designers and architects, and artistic inspiration: art, literature and film that inspire fashion. **Open to all students. (.5 English credit)***



*In this CP-level History course, students will examine social, political, scientific, and economic issues and how they influence decision making on the global stage. Students will explore multiple perspectives on these diverse topics in order to generate solutions. The course uses the Model United Nations framework for committee debates. Throughout the semester, students will cultivate research, writing, debate, and collaboration skills. This course will also serve as a preparatory time for the school's Model UN team, which will collaborate with other area Model UN programs and compete at the Maine Model UN conference in the spring. This course is offered in the **spring semester only, but open to all students.** (.5 Social Science credit)*

## Soft Skills for Agency & Social Ease / CP - 2405



*This CP-level semester Social Studies course will offer strategies and information to promote agency, or personal and social ease. Subjects will include mind/body science, mental health, memoirs and inspirational articles about dealing with personal trauma and building resilience, healthy and unhealthy habit discussions, collaboration and team building, developing personal identity through responsible and purposeful social media practices, a sound work/life balance, and exploring resources to support personal and family wellness. **Open to freshmen and sophomores.** (.5 Social Science credit)*

## Native American Studies / CP - 2413



*This CP-level semester History course delves into the rich history, culture, and contemporary issues of Indigenous peoples in North America. Students will explore the diverse traditions, languages, art, and spiritual beliefs of Native American tribes. The course will examine the impact of colonization, treaties, and government policies on Native communities. Through literature, films, discussions, and hands-on activities, students will gain a deeper understanding of the resilience and contributions of Native Americans to society. Additionally, discussions on sovereignty, environmental concerns, and social justice issues will be integral to the curriculum. By the end of the course, students will have a comprehensive appreciation of Native American heritage and a critical awareness of the challenges faced by Indigenous populations today. **Open to freshmen, sophomores and juniors.** (.5 Social Science credit)*

## War. What is it Good For? / CP - 2314



*War has had diverse effects throughout history. Despite the obvious negative costs of life and destruction of families, property, and communities, many advances in science and technology are related to war, and it has been the genesis for classic literary and art works, as well as global alliances and unions. Human lust for profit and power has made war a permanent element of the human condition. This CP-level semester History course will focus on the United States military and government, their involvement in major wars throughout history, and the numerous impacts of said wars. Students will investigate military practices and the evolution of war tactics, the geography of war, the dichotomy of technological advancement and war, war for profit, economic impacts of wars, war and health, global policies and organizations, and war's influence on economies. **Open to freshmen, sophomores and juniors.** (.5 Social Science credit)*



## Modern Poetry / CP - 2327



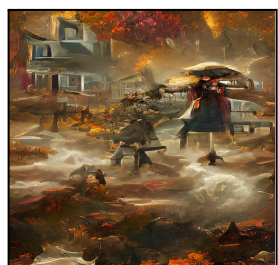
*This semester course explores modern poetic forms, language, and poets. Students will explore the elements of poetry from the late nineteenth century to the present, learning to develop inventive approaches to language and imagery, layered use of voice and musicality, style, and diction. Students will engage in reading, discussing, and writing about a wide range of modern and contemporary poetry, including the works of influential poets such as Emily Dickinson, Walt Whitman, and 21st-century avant-garde poets like Tracie Morris. Themes will explore personal identity, individual consciousness, and the complexities of human existence. This course aims to challenge students to read critically, think differently about poetry, and make informed literary responses to poetic texts. Students will compose original poetry, respond to classmates' work, and explore the relationship between experimental poetry and teaching. The courses will cover the transition between modernism and postmodernism in poetry. Active participation in discussions and creative exercises are required. **Open to all students. (.5 English credit)***

## Human Geography & Ecology / CP - 2315



*This CP-level semester History course will merge the study of both social and scientific interaction of human beings and their environment. Utilizing human ecology to understand modern civilization's impact on the environment, and the environment's role in sustaining human life. Students will study several ecological crises that modern consumerist civ is facing, as well as the social, political, and environmental factors that prompt both cultural and more localized migration. The ecological impacts of these migrations will also be investigated through topical readings and discussions spanning environmental, social, and ethical topics. This course will promote civic engagement and ecological literacy by studying ongoing modern research. Classwork will include reading and documentary film analyses and discussion. **Open to freshmen, sophomores, and juniors. (.5 Social Science credit)***

## Fallout / CP - 2316



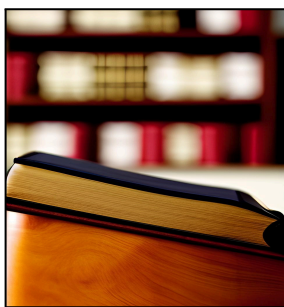
*This CP-level semester English course will ponder human existence and evaluate the complex topic of human nature during adversity by learning about the different aspects and adverse side effects of a variety of situations including dystopian scenarios. Vehicles will include articles, essays, literature, music, art, as well as student's own research. Students will be expected to engage in reading, writing, discussion, and research based activities to increase skills and critical thinking. **Open to freshmen, sophomores and juniors. (.5 English credit)***

## Family Dynamics / CP - 2317



*In this semester CP English course, students will explore the history and evolution of the family. Students will develop a comprehensive understanding of the dynamics within families, focusing on relationships, communication, roles, and structures. Students will explore various aspects of family life, including parenting styles, conflict resolution, cultural influences, and the impact of technology on family dynamics. Those interested in jobs in daycares, schools, social services, and homemaking are encouraged to enroll. Units will focus on family sociology, child development, developmental psychology, gender in the family, matriarchal and patriarchal cultures, family planning and economics, and a basic introduction to genetics. Students will polish literacy and communication skills and seek opportunities to explore certifications and careers connecting to the wellbeing of families. **Open to sophomores, juniors and seniors. (.5 English credit)***

## Law & Criminology in the US / CP - 2414



*This CP-level Social Studies semester course offers an introduction that outlines the legal systems that exist in America with an introduction to criminology. Both criminal and civil law will be taught, and students will acquire legal vocabulary. Students will study the constitutional history of the legal system in America to become familiar with the roles of citizen participation in the US legal system. They will also study the criminal justice and corrections systems, as well as the origins of deviant behavior. Classwork will include reading and documentary film analyses and discussion. **Open to sophomores, juniors, and seniors. (.5 Social Science credit)***

## US & Them: Modern Global Issues / CP - 2408



*This CP-level Social Studies semester course focuses on contemporary world issues through the lenses of the US and various world nations. Issues include social change movements, the impact of technology on modern society, climate change, the future of democratic movements, the increasing intolerance for opposing points of view, terrorism around the world, global human rights issues, increasing rates of asylum-seeking and world health issues. These topics will be introduced and analyzed from the different perspectives of the nations involved. Classwork that includes reading and documentary film analyses and discussion will focus learning by making connections to sociological or psychological perspectives, and media. **Open to sophomores, juniors, and seniors. (.5 Social Science credit)***

## The Culture of Madness / CP - 2326



*This CP-level English course will focus on the diverse ways that civilizations have interpreted and reacted to those labeled as mentally unstable. By delving into the various portrayals of mental health, madness, hysteria, and psychological conditions in novels, short stories, poems, essays, and articles, students will analyze how authors depict and characterize madness, examining the societal, cultural, and personal implications of mental health struggles. This course aims to foster critical thinking skills, empathy, and a deeper understanding of the complexities surrounding mental illness as depicted in literature. Students will engage in close reading, discuss, research, debate, and write argument and synthesis essays in this semester-long course. **Open to juniors, and seniors. (.5 English credit)***

## Leadership in the Professional Domain / CP - 2319



*This CP-level semester English course will outline the introductory concepts of leadership in the workplace. As the world changes, so do the expectations and skills necessary to excel and manage within these changing power structures. Students will read and discuss the foundations of leadership and management, business psychology, social dynamics and communication in the workplace, gender and harassment, business ethics, marketing, law, and budgets and investments. Students will continue to polish their writing skills in business writing and essay assignments. Opportunities for job shadows in professional settings will be sought for practical application of skills building in leadership. The course will utilize a professional leadership portfolio to show mastery of leadership concepts and as an aid for future professional networking. **Open to juniors and seniors. (.5 English credit)***



## Architects of the Future / CP - 2322



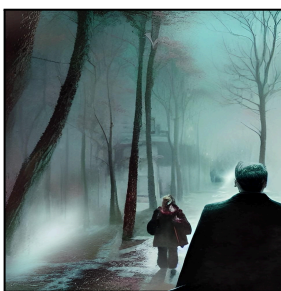
*This CP-level semester English course will explore the many facets of design and the diverse branches of engineering. With a basis in the historical, environmental, architectural, health, and ethical implications of these fields, students will read about new advances in aerospace, automotive, civil, biomedical, chemical, nuclear, computer, electrical, environmental, structural, industrial, and mechanical engineering. They will research, discuss, and debate the governance, moral, and environmental impact of engineering fields on humanity and their social systems, health, and future. Connections outside the classroom will be sought for practical connections. Students will learn and practice professional writing, and they will write argument and expository essays to prepare for post-secondary endeavors. **Open to juniors and seniors. (.5 English credit)***

## Death & Dying / CP - 2409



*Memento Mori! This CP-level Social Studies class examines human reactions to the inevitable. Death is a ubiquitous part of human life, art, and history. In this semester course, students will use multiple lenses to study infirmity, death, and beyond. The course begins with an examination of cultural & historical perspectives on death, with an emphasis on universal practices. Much of the second half of the course focuses on practical aspects of preparing for end-of-life care and planning. This course features in-person connections with professionals working in death-related industries and services. This is an integrated study drawing from literature, arts, religion, ethics, psychology, sociology, medicine, and history. **Open to juniors and seniors. (.5 Social Science credit)***

## History on the Big Screen / CP - 2410



*This CP-level History course will use film as a learning tool to form a better understanding of historical events and cultural eras. The students will apply historical background from the time periods and critically analyze the accuracy and efficacy of the films. Students will write essays that scrutinize and dissect the films. Films will be chosen by vote of enrolled students with input from the faculty. Classwork will include reading and documentary film analyses and discussion. With few exceptions, all coursework will be completed in class. **Open to sophomores, juniors, and seniors. (.5 Social Science credit)***

## Business & Economic Literacy / CP - 2328



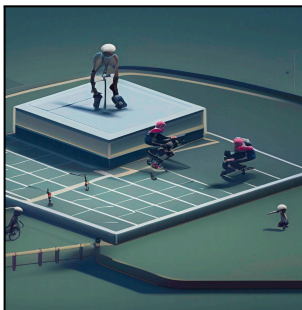
*This CP Social Studies semester course is designed to provide students with a introductory understanding of fundamental concepts in business and economics. Students will explore the principles of business operations, financial management, economic systems, and their impact on society. Through a combination of theoretical learning and practical applications, students will develop critical thinking skills and foundational literacy essential for further study of the business world. Topics include: Introduction to Economics, Marketing, Business Operations, Consumer Behavior, Globalization and Trade, Entrepreneurship, Economic Policy, and Business Ethics. **Open to juniors and seniors. (.5 Social Science credit)***

## Psychology / CP - 821



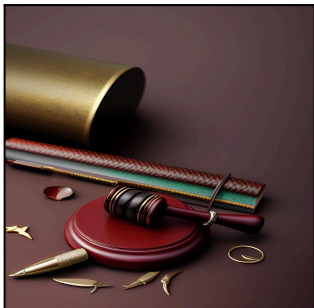
*CP Psychology is a discussion-based Social Studies course in which students learn many psychological terms and theories and use them to analyze current events, life, and film. While much of the work for the course will be done in class, students will also write two formal film analysis papers which count for a significant portion of final grades. These papers are intended to prepare students for the rigors of college courses. **Open to juniors and seniors. (.5 Social Science credit)***

## Sociology / CP - 215



*MCI's CP Sociology course combines an introduction to sociology with the study of deviance and social psychology. Sociology examines social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within them. This Social Studies course is discussion based, with students leading discussions as often as possible. Students will use social theory to analyze their lives, society, current events, and film. **Open to juniors and seniors. (.5 Social Science credit)***

## Introduction to Philosophy / CP - 293



*The field of Philosophy is divided into four categories. They are Logic, Metaphysics, Epistemology, and Ethics. This CP-level Social Studies course will lay the groundwork of the basics of philosophy in order to then be able to intelligently engage with philosophical readings, debates, and write about philosophy. It will introduce students to important traditional theories, new directions in philosophical thinking, and view contemporary controversies through various philosophical lenses in an attempt to understand multiple viewpoints. The discussion of those controversies will be a regular part of class interaction. **Open to juniors and seniors. (.5 Social Science credit)***

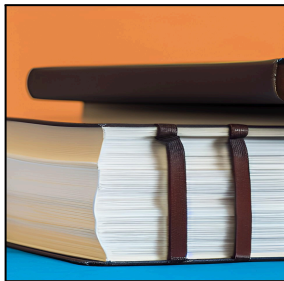
## College Composition UMFK / CE 2110



*College Composition is a concurrent enrollment writing course that is designed to build on a student's strengths as readers and writers. This class helps to further develop critical thinking skills, establish more research and writing strategies, and improve ability to determine, create, and communicate meaning. Students will learn to constructively relate their own ideas and perspectives to those of others and build clear, well organized arguments. During the writing process, students will expand inquiries beyond the personal into complex discussions in academic, literary, and public textual forms. In this seminar, students will learn to craft and pursue their inquiries as they engage in inventing, composing, and revising their writing, both individually and collaboratively. Concurrent enrollment is free for Maine public education students and at a reduced tuition rate for international and out of state students. Students will receive 3 college credits from University of Maine Fort Kent upon successful completion. **Open for seniors. (.5 English credit)***

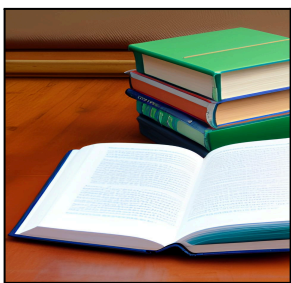
## AP and Concurrent Enrollment Courses (Two-Semester / 1 Credit Courses)

### Advanced Placement (AP®) Language & Composition - 2323



*This college-level literature course emphasizes understanding and analysis of imaginative writing, the college essay, and the senior project. Students will read and write frequent lengthy works. Each student will initiate, develop, implement, and present the Senior Project during the fourth quarter. Taking the AP® exam (and payment of the AP exam fee by the student) is a requirement for successful completion of the course. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisite: academic contract with instructor, writing and reading proficiency (formally evaluated), teacher recommendations, evidence of academic success (grades), and ongoing evidence of scholarly habits. Open for juniors and seniors. (1 English credit)***

### Advanced Placement (AP®) Literature & Composition - 2324



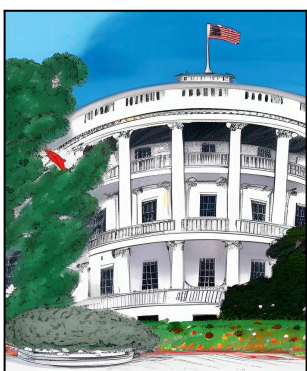
*This college-level literature course emphasizes understanding and analysis of imaginative writing, the college essay, and the senior project. Students will read and write frequent lengthy works. Each student will initiate, develop, implement, and present the Senior Project during the fourth quarter. Taking the AP® exam (and payment of the AP exam fee by the student) is a requirement for successful completion of the course. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisite: academic contract with instructor, writing and reading proficiency (formally evaluated), teacher recommendations, evidence of academic success (grades) and ongoing evidence of scholarly habits. Open for juniors and seniors. (1 English credit)***

### Advanced Placement (AP®) US History - 2411



*Students will study American history from pre-European contact to the end of the twentieth century. Rhetoric and history will be integrated throughout this college-level course. Argumentation, synthesis, and analysis of non-fiction are emphasized in this course. There will be frequent writing assessments and demanding homework expectations. Students will research, write, and orally present the Manson Essay, a graduation requirement. Writing, reading, analysis, and discussion are emphasized. This course requires much independent work. Taking the AP® exam (and payment of the AP exam fee by the student) is a requirement for successful completion of each course. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisite: academic contract with instructor, writing and reading proficiency (formally evaluated), teacher recommendations, evidence of academic success (grades) and ongoing evidence of scholarly habits. Open for juniors and seniors. (1 Social Science credit)***

### Advanced Placement (AP®) US Government & Politics - 2412



*This introductory course to US Government and Politics will study constitutional underpinnings, civil liberties and civil rights, political culture, and socialization, citizen participation and influence, political institutions, and policy-making that are the foundation of modern U.S. government and politics. Students will interpret classic and contemporary political writings and apply pertinent Supreme Court rulings to enduring social and political issues in this country. This course prepares students to take the Advanced Placement United States Government and Politics exam. An AP® exam fee is required for students choosing to take the exam. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisite: academic contract with instructor, writing and reading proficiency (formally evaluated), teacher recommendations, evidence of academic success (grades), and ongoing evidence of scholarly habits. Open for juniors and seniors. (1 Social Science credit)***



## English for Speakers of Other Languages (ESL/ESOL)

### ESOL Integrated Skills I - 1011



*This intensive daily class is designed for English Language Learners whose English is approaching the intermediate level of proficiency. Students will work on building their academic reading, writing, speaking, and listening skills. (1 credit)*

### ESOL Integrated Skills II - 1012



*This intensive daily class is designed for English Language Learners whose English is approaching the advanced level of proficiency. Students will work on building their academic reading, writing, speaking, and listening skills. This course is intended to prepare students for college preparatory humanities classes. (1 credit)*

### ESOL US History - 1014



*This two-semester course aims to introduce English Language Learners to the key events in American history while exploring the evolution of American culture and identity. Starting with Native American history and culminating with the Civil War, students will analyze historical events, participate in group discussions, and expand their English vocabulary. Additionally, the course will equip students with crucial skills such as note-taking, online research, critical thinking, and academic writing. (1 credit)*

### ESOL Advanced Academic Writing - 1013



*This course is intended for international students whose English is approaching fluency. Students will learn how to conduct research, analyze academic texts, and effectively present and debate complex ideas. By the end of the course, students will be equipped with the language skills necessary to engage in research writing and structured debates in English, and will be fully prepared to enroll in mainstream humanities classes at MCI. (1 credit)*

## Extended Learning Opportunities (ELO's)

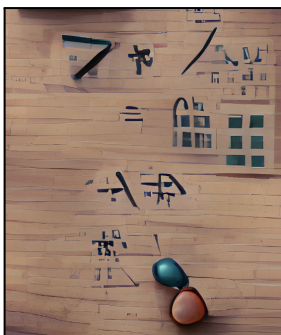
**ELO's**

*MCI believes firmly that collaboration and cooperation is central to the educational success of our students. “ELO’s provide hands-on, credit-bearing experiences outside of the traditional classroom with an emphasis on community-based career exploration. They are highly personalized opportunities for students to engage in learning in ways that make sense for them and connect their learning to everyday life in meaningful ways. ELO’s are a unique mix of academic instruction and assignments, such as papers and presentations, and combine experiential learning components like project-based learning, internships, and job shadows”. ELO opportunities exist across the content areas in support of your personal pathway (.5 credit per ELO)*

# Mathematics

*In all mathematics courses, there is a strong emphasis on problem solving, real-world applications and verbally communicating mathematical concepts. Students are active participants in their own learning as teachers aid them in making their own discoveries about mathematics. Algebra, geometry, statistics, probability and discrete math are integrated into all courses, thus connecting the traditional branches of mathematics as they are in the real world. Placement in specific courses is always dependent on teacher recommendation. The courses are semester based.*

## Pre-Algebra - 328



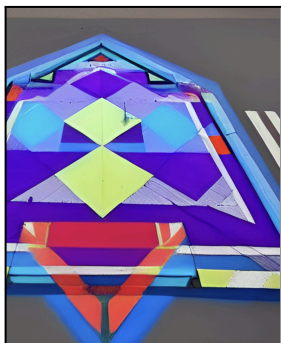
*The pre-algebra course is designed for students who find the study of mathematics to be extremely challenging. Students enrolled in these classes have historically experienced difficulty in mastering the concepts that are the foundation of mathematics, such as the computation of fractions and decimals. Though often very competent in other disciplines, students for whom math presents a unique challenge find this course helpful. Integrated throughout the curriculum are the basic concepts of algebra, geometry, probability, statistics and discrete math. The course is paced according to the needs of each individual group of students. (1 credit)*

## Algebra I &amp; Data Analysis / CP - 357

X0	10	-30	-30	2
X1	10	-30	-30	0
X2	10	-30	-30	0
X3	10	-30	-30	0
X4	10	-30	-30	0
X5	10	-30	-30	0
X6	10	-30	-30	0
X7	10	-30	-30	0
X8	10	-30	-30	0
X9	10	-30	-30	0
X10	10	-30	-30	0
X11	10	-30	-30	0
X12	10	-30	-30	0
X13	10	-30	-30	0
X14	10	-30	-30	0
X15	10	-30	-30	0
X16	10	-30	-30	0
X17	10	-30	-30	0
X18	10	-30	-30	0
X19	10	-30	-30	0
X20	10	-30	-30	0
X21	10	-30	-30	0
X22	10	-30	-30	0
X23	10	-30	-30	0
X24	10	-30	-30	0
X25	10	-30	-30	0
X26	10	-30	-30	0
X27	10	-30	-30	0
X28	10	-30	-30	0
X29	10	-30	-30	0
X30	10	-30	-30	0
X31	10	-30	-30	0
X32	10	-30	-30	0
X33	10	-30	-30	0
X34	10	-30	-30	0
X35	10	-30	-30	0
X36	10	-30	-30	0
X37	10	-30	-30	0
X38	10	-30	-30	0
X39	10	-30	-30	0
X40	10	-30	-30	0
X41	10	-30	-30	0
X42	10	-30	-30	0
X43	10	-30	-30	0
X44	10	-30	-30	0
X45	10	-30	-30	0
X46	10	-30	-30	0
X47	10	-30	-30	0
X48	10	-30	-30	0
X49	10	-30	-30	0
X50	10	-30	-30	0
X51	10	-30	-30	0
X52	10	-30	-30	0
X53	10	-30	-30	0
X54	10	-30	-30	0
X55	10	-30	-30	0
X56	10	-30	-30	0
X57	10	-30	-30	0
X58	10	-30	-30	0
X59	10	-30	-30	0
X60	10	-30	-30	0
X61	10	-30	-30	0
X62	10	-30	-30	0
X63	10	-30	-30	0
X64	10	-30	-30	0
X65	10	-30	-30	0
X66	10	-30	-30	0
X67	10	-30	-30	0
X68	10	-30	-30	0
X69	10	-30	-30	0
X70	10	-30	-30	0
X71	10	-30	-30	0
X72	10	-30	-30	0
X73	10	-30	-30	0
X74	10	-30	-30	0
X75	10	-30	-30	0
X76	10	-30	-30	0
X77	10	-30	-30	0
X78	10	-30	-30	0
X79	10	-30	-30	0
X80	10	-30	-30	0
X81	10	-30	-30	0
X82	10	-30	-30	0
X83	10	-30	-30	0
X84	10	-30	-30	0
X85	10	-30	-30	0
X86	10	-30	-30	0
X87	10	-30	-30	0
X88	10	-30	-30	0
X89	10	-30	-30	0
X90	10	-30	-30	0
X91	10	-30	-30	0
X92	10	-30	-30	0
X93	10	-30	-30	0
X94	10	-30	-30	0
X95	10	-30	-30	0
X96	10	-30	-30	0
X97	10	-30	-30	0
X98	10	-30	-30	0
X99	10	-30	-30	0

*This is a year-long course that covers the introduction to Algebra standards. Topics include univariate and bivariate data, solving, graphing, writing linear equations, inequalities, absolute values, and functions. The second semester's topics include systems of equations, exponents and exponential functions, data analysis, radicals, polynomials and quadratic functions. Students will build on their knowledge of linear functions and learn regression techniques to describe approximate linear relationships between quantities. They'll use graphical representations and knowledge of the context to make judgments about the appropriateness of linear models. Students will create and analyze data to construct and compare linear, quadratic, and exponential models and solve problems. The use of hands-on activities, mini-projects and technology will be threaded throughout. (1 credit)*

## Geometry B & Probability / CP - 319



*This course covers the second half of Geometry and is paired with Algebra IB as a continuation of Math I; this will only be offered 2024-2025.*

*This course is the first semester that covers basic properties of plane and solid figures such as triangles, quadrilaterals, polygons, coordinate and transformational geometry, the study of similarity, right triangles, circles, polyhedron, basic trigonometry, area, volume, and coordinate geometry. Students will use Geometric Constructions to deepen their understanding of shapes and figures throughout the semester. The concepts of deductive and inductive proofs are studied. GeoGebra, hands-on activities, projects and technology will be utilized throughout the semester. **Prerequisite: Geometry A (0.5 credit)***

## Algebra IB & Data Analysis / CP - 302



*This course covers the second half of Algebra I and is paired with Geometry B as a continuation of Math I; this will only be offered 2024-2025.*

*This course is the second semester that covers an introduction to Algebra standards. Topics include systems of equations, exponents and exponential functions, data analysis, radicals, polynomials and quadratic functions. Students will create and analyze data to construct and compare linear, quadratic, and exponential models and solve problems. The use of hands-on activities, mini-projects and technology will be threaded throughout the semester. **Prerequisite: Algebra IA & Data Analysis (0.5 credit)***

## Geometry & Probability - 320



*This is a year-long course that introduces the student to the introductory topics of Euclidean Geometry. Topics include the basic properties of plane and solid figures such as triangles, quadrilaterals, polygons, coordinate and transformational geometry, the study of similarity, right triangles, circles, polyhedron, basic trigonometry, area, volume, and coordinate geometry. Students will use Geometric Constructions to deepen their understanding of shapes and figures throughout the semester. The concepts of deductive and inductive proofs are studied. GeoGebra, hands-on activities, projects and technology will be utilized throughout the semester. Additional topics in Probability will include sample spaces, uniform probability, the fundamental counting principle, Venn diagrams and independence. **(1 credit)***

## Geometry & Probability / CP - 337



*Course material covers the same topics as general Geometry & Probability, but with more emphasis on deep analysis and understanding. Topics will be explored in greater depth and detail. Students enrolling in this class must have strong critical thinking skills. **(1 credit)***



## Algebra II - 332



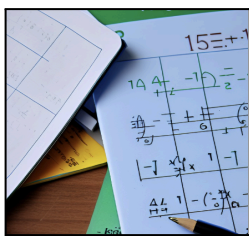
This course is designed to give students more time to develop and understand the same topics in Algebra II CP. Some topics are introduced to students and will be later developed in a College Algebra or PreCalculus course. Students begin the course with a study of sequences, which is also an opportunity to revisit linear and exponential functions. Students represent functions in a variety of ways while addressing some aspects of mathematical modeling. This work leads to looking at situations that are well modeled by polynomials before pivoting to a study of the structure of polynomial graphs and expressions. Students do arithmetic on polynomials and rational functions and identify end behavior. Next, students extend exponent rules to include rational exponents. They solve equations involving square and cube roots before expanding the number system to include complex numbers. Building on rational exponents, students return to their study of exponential functions. They will use logarithms to solve for unknown exponents, and are introduced to the number  $e$  and its use in modeling continuous growth. Logarithm functions and some situations they model well are also briefly addressed. **(1 credit)**

## Algebra II / CP - 331



Students begin the course with a study of sequences, which is also an opportunity to revisit linear and exponential functions. Students represent functions in a variety of ways while addressing some aspects of mathematical modeling. This work leads to looking at situations that are well modeled by polynomials before pivoting to a study of the structure of polynomial graphs and expressions. Students do arithmetic on polynomials and rational functions and use different forms to identify asymptotes and end behavior. Next, students extend exponent rules to include rational exponents. They solve equations involving square and cube roots before expanding the number system to include complex numbers. Building on rational exponents, students return to their study of exponential functions. They will use logarithms to solve for unknown exponents, and are introduced to the number  $e$  and its use in modeling continuous growth. Logarithm functions and some situations they model well are also briefly addressed. **(1 credit)**

## College Algebra (UMFK) / CE - 334



CE College Algebra is a full year course that provides students with basic algebraic skills. Covers algebraic concepts including linear, fractional and quadratic and exponential equations and graphs. Also covers basic trigonometry for right triangles. Concurrent enrollment is free for Maine public education students and at a reduced tuition rate for international and out of state students. This course is offered on MCI campus and is open to students who have fulfilled the necessary prerequisites. Students will receive 3 college credits from University of Maine Fort Kent upon successful completion. **Prerequisite: Algebra II (1 MCI Math credit)**

## Introduction to Data Science - 324



Introduction to Data Science (IDS) is designed to introduce students to the exciting opportunities available at the intersection of data analysis, computing, and mathematics through hands-on activities. Data are everywhere, and this curriculum will help prepare students to live in a world of data. The curriculum focuses on practical applications of data analysis to give students concrete and applicable skills. Instead of using small, tailored, curated data sets as in a traditional statistics curriculum, this curriculum engages students with a wider world of data that fall into the "Big Data" paradigm and are relevant to students' lives. In contrast to the traditional formula-based approach, in IDS, statistical inference is taught algorithmically, using modern randomization and simulation techniques. Students will learn to find and communicate meaning in data, and to think critically about arguments based on data. **Prerequisites: Algebra I and Geometry (1 credit)**



## Pre-Calculus / CP - 397



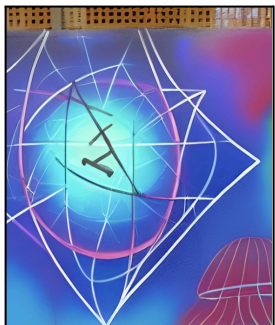
In this course students regularly employ a variety of problem-solving techniques and build skills using the TI-84 graphing calculator. Students study advanced functions and graphing, discrete mathematics, statistics and Trigonometry. Students will be expected to purchase their own TI-84 calculator or rent one from MCI. **Prerequisite: Algebra II (1 credit)**

## Advanced Placement (AP<sup>®</sup>) Pre-calculus - 338



This course equips students with mathematical tools in real-world modeling situations in preparation for using these tools in higher-level math and science courses. Topics include Polynomial and Rational Functions, Exponential and Logarithmic Functions, Trigonometric and Polar Functions, and Functions involving Parameters, Vectors and Matrices. **Prerequisite: Algebra II (1 credit)**

## Advanced Placement (AP<sup>®</sup>) Calculus AB - 340



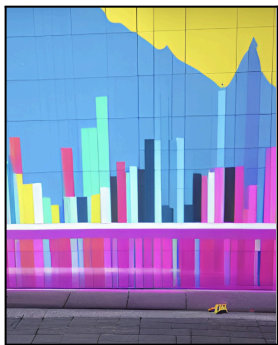
This course covers the same material as the traditional Calculus course, but with more emphasis on analysis, application and the relationship between all representations of functions. The course prepares students to take the College Board's AP<sup>®</sup> Calculus AB exam in the spring. Taking the AP<sup>®</sup> exam (and payment of the AP exam fee by the student) is a requirement for successful completion of the course. Qualified students may receive AP exam fee assistance through The College Board. Students will be expected to purchase their own TI-84 calculator or rent one from MCI. **Prerequisite: Pre-Calculus and teacher recommendation (1 credit)**

## Advanced Placement (AP<sup>®</sup>) Calculus BC - 342



This course covers the equivalent of two semesters of college Calculus. Students will expand on knowledge from Calculus AB to further explore limits, derivatives and integrals and apply their understanding to challenging new concepts such as sequences, series, parametric curves and polar curves. The course is designed to prepare students to take the College Board's AP<sup>®</sup> Calculus BC exam in the spring. Taking the AP<sup>®</sup> exam (and payment of the AP exam fee by the student) is a requirement for successful completion of the course. Qualified students may receive AP exam fee assistance through The College Board. Students will be expected to purchase their own TI-84 calculator or rent one from MCI. **Prerequisite: AP<sup>®</sup> Calculus AB or teacher recommendation (1 credit)**

## Advanced Placement (AP®) Statistics - 349



*This course prepares students to take the College Board's AP® Statistics exam in the spring. Per the College Board course description, this AP Statistics course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes evident in the content, skills, and assessment in the AP Statistics course: exploring data, sampling and experimentation, probability and simulation, and statistical inference. Equivalent to a one-semester, introductory, non-calculus-based college course in statistics. Taking the AP® exam (and payment of the AP exam fee by the student) is a requirement for successful completion of the course. Qualified students may receive AP exam fee assistance through The CollegeBoard. **Prerequisite: Algebra 2 or teacher recommendation (1 credit)***

## Business Math - 382



*The business math course is designed to equip students with essential skills for understanding business concepts and financial literacy. It covers basic arithmetic operations, financial literacy topics like personal finance and interest rates, fundamental business concepts such as profit and loss calculations, pricing strategies, and statistics for business. Students will also learn about percentages, ratios, currency exchange, and international trade calculations. Practical applications using software tools like Excel, real-world case studies, and a final project integrating all concepts are included to provide a comprehensive learning experience preparing students for future academic pursuits or careers in business **(1 credit)***

## Accounting - 383



*This accounting course offers students a comprehensive introduction to accounting principles, financial statements, and basic financial analysis. Students will learn to record, classify, and analyze business transactions, gaining essential skills in accounting practices. The course covers topics such as financial statements, budgeting, cost accounting, and taxation basics, preparing students for further studies in finance or business-related fields. Assessment methods include quizzes, assignments, exams, and projects to evaluate understanding and application of accounting concepts **(.5 credit)***

## Science

*Science courses at MCI support students in learning to inquire, understand and solve problems using scientific methods. Our courses integrate the processes of investigation and communication about the natural world with a scientific body of knowledge that includes concepts, principles, facts, laws, and theories about how our world and universe work. The Science Department offers students a variety of courses and levels from Earth and Space Science in freshman year through AP® courses. All students must complete four credits in science. These must include an earned credit in each of the following: Earth and Space Science; Biology; and Chemistry, Physics or Engineering.*

## Earth and Space Science - 418



*This course studies the four primary Earth Systems--the Atmosphere, Biosphere, Geosphere, and Hydrosphere--and the interconnections between each system. Through various methods of scientific inquiry, students will examine the interactions of air, water, and other physical processes that shape the physical world. Students will also explore the Earth and its place in space as part of the solar system, galaxy, and the universe. (1 credit)*

## Earth and Space Science / CP - 419



*Course material covers the same topics as General Earth Science, but with more emphasis on deep analysis and understanding. Topics will be explored in greater depth and detail. Students enrolling in this class must have good mathematical and strong critical thinking skills. (1 credit)*

## Biology - 420



*A systems approach to the important concepts and ideas of biology, this course is designed to lead students to an understanding and appreciation of the common characteristics of living systems. Topics include cells, genetics, organisms and ecosystems. This class includes many lab activities, which require analytical and communication skills. (1 credit)*

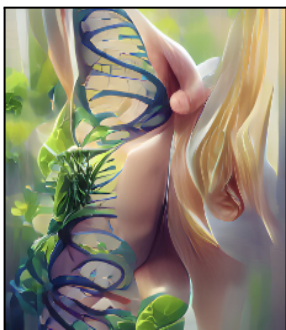
## Biology / CP - 421



*This course is an exploration of all life, from molecules to ecosystems. This course will study the structure and function and behavior of organisms on a changing planet. Students are required to solve problems using algebra, measure and compute accurately, research and write critically and design experiments. This class includes extensive lab work, which requires math and reporting skills. (1 credit)*



## Advanced Placement (AP<sup>®</sup>) Biology (2 periods) - 415



*This is a college-level course designated as an official AP course by the College Board. This course addresses all areas of modern biology through extensive reading, writing, computation and lab work. Topics include the chemistry of life; cell structure and function; cellular energetics (respiration, photosynthesis, enzymes); cell communication and cell cycle; heredity; gene expression and regulation; natural selection; ecology. Qualified students may receive AP exam fee assistance through The College Board. Summer work is required for all students. **Prerequisites: grades of 80 or above in Biology, Chemistry and Algebra (1.5 credits)***

## Chemistry / CP - 473



*This is a standard high school chemistry course in which students perform a variety of activities, lab experiments and research in order to explore and explain matter. Topics include classification and measurement of matter, atomic theory, structure of atoms, use of the periodic table, chemical bonding and formulas, the mole concept, and stoichiometry. **Prerequisites: Algebra I (completed with minimum grade of 80), Algebra II (may be taken concurrently); Junior/Senior standing or recommendation from a science teacher (1 credit)***

## Advanced Placement (AP<sup>®</sup>) Chemistry (2 periods) - 431



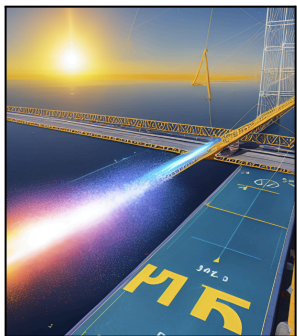
*Learn about the fundamental concepts of chemistry including structure and states of matter, intermolecular forces, and reactions. Students will conduct hands-on lab investigations and use chemical calculations to solve problems. The skills students learn include designing experiments and procedures to test a prediction or theory; creating graphs, diagrams, and models that represent chemical phenomena; explaining how the microscopic structure of a substance determines its chemical properties; balancing a chemical equation; and making a scientific claim and supporting it with evidence. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisites: Chemistry CP and Algebra II (both completed with minimum grade of 80) (1.5 credit)***

## Physics / CP - 441



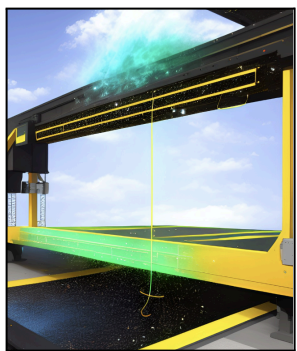
*This is primarily a course in mechanics and teaches experimental design with graphical and numerical analysis. Experimental results are used to teach the fundamentals of linear motion and force and the analogous topics of rotational motion and torque. Students will also learn to solve problems using the conserved quantities of momentum and energy. Students must have good mathematical skills. **Prerequisite: Algebra I (completed with minimum grade of 80), Algebra II (may be taken concurrently) (1 credit)***

## Advanced Placement (AP<sup>®</sup>) Physics I - 410



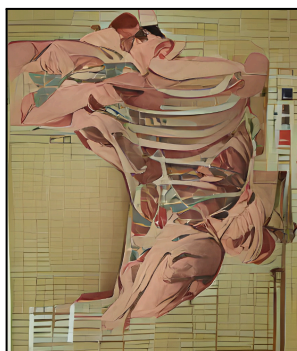
*AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisites: Algebra I (completed with a minimum grade of 80), Algebra II (may be taken concurrently) (1 credit)***

## Advanced Placement (AP<sup>®</sup>) Physics II - 474



*AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisites: successful completion of AP Physics 1 or CP Physics, and Pre-calculus (may be taken concurrently) (1 credit)***

## Advanced Anatomy & Physiology (with UMFK / CE option) - 488



*Course material focuses on the structure and function of the eleven human body systems. It is a fast paced, content focused class with a small lab section. An emphasis is placed on learning proper terminology, as well as the integration of body systems. This course may be taken as a concurrent enrollment course in which students earn both high school and university credits. Concurrent enrollment is free for Maine public education students and at a reduced rate for international and out of state students. Four college credits will be awarded by University of Maine at Fort Kent upon successful completion of each semester for a total of 8 college credits. **Prerequisite: CP Biology (1 credit)***

## Environmental Science - 496



*This course provides students with a foundation in the principles and concepts of environmental science. Topic selection is based on current environmental science issues and includes: sustainability, population, recycling, waste management, alternative energies, agricultural practices, and human relationships with environmental change. Students are required to work in the student garden and participate in the campus recycling program and greenhouse. **Prerequisite: Biology (1 credit)***



*This course is a college-level, introductory environmental science course devoted to integrating our understanding of biological, physical and social sciences through the study of environmental interactions. Students will examine the causes, consequences, and potential solutions for both natural and human created environmental problems along with the interrelationships that living things have with each other and with their environment. These concepts are explored through laboratory activities, environmental case studies, and student projects. Considerable emphasis is placed on field investigations as well as on laboratory study. Qualified students may receive AP exam fee assistance through The College Board. **Prerequisite: Biology (completed with a minimum grade of 85) (1 credit)***

## Sustainable Living - 481



*This course investigates the challenges of implementing sustainability in a variety of forms: home energy use, recycling/reusing/reducing/precycling, climate change and pollution, natural resource use, gardening and ecosystems/land use. This class is a hands-on approach to learning how to reduce the environmental impact of your living area, home, and here at MCI. Class size is limited, and enrollment is **restricted to juniors and seniors**. **Prerequisites: Biology or instructor permission (.5 credit)***

## Botany - 492



*This course examines the vital role of plants on Earth along with plant anatomy, growth and development and the characteristics of major groups of plants. Students will engage in hands-on projects with plants. As a part of the class students will participate in the maintenance and growth of plants in the garden, around campus and in the greenhouse. **Prerequisites: Biology (may be concurrently taking) (.5 credit)***

## Laboratory Science: Wildlife Forensics - 471



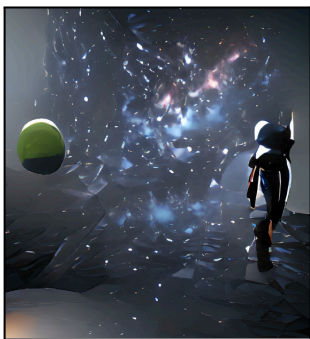
*This course covers the multi-billion dollar world of illegal wildlife trade and the efforts of wildlife forensic specialists to police it. You will learn how to conduct investigations using real-life cases of poaching and illegal trade. The course includes training in forensic lab techniques and a survey of current laws and job opportunities. This course is offered in the **full semester only**. **Prerequisite: Biology (.5 credit)***





*This course explores the scientific aspect behind crime scene investigations. Major topics include fingerprint analysis, hair/fiber evidence, blood and DNA evidence, toxicology, handwriting and document analysis, ballistics and impressions. A focus will be on how this evidence is collected from a crime scene and its use in determining guilt or innocence. The class will have a heavy lab focus and end with a mock crime scene investigation. **Prerequisite: Biology (may be concurrently taking) (.5 credit)***

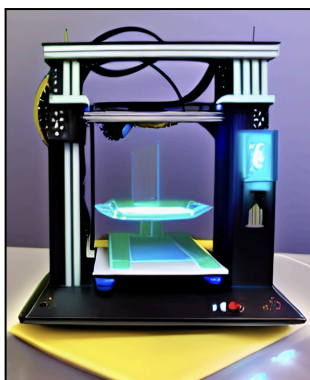
## Astronomy - 454



*This is a semester-long course that will build upon the foundational Astronomy topics learned during Earth and Space Science. More specifically, students will study stars, galaxies, and Cosmology. Students will explore the nature of light, how we view our universe, and each student will learn about optics with a focus on using telescopes to view parts of the solar system. **Prerequisite: Earth and Space Science (.5 credit)***

## Technology and Engineering

### Introduction to Design - 499



*This course is a semester-long course for students interested in learning the basic fundamentals of modeling, scaling, and 3D printing. This course will provide students with a foundation of designing and modeling skills that will be incorporated in future STEM classes here at Maine Central Institute. Students will learn the principles of design, how a 3D printer works, and how to successfully print models that can be tested in the lab setting. As students explore the capabilities of 3D printing, there will be a focus on real life application for the models they design and print. Tinkered is one platform that will be used to design models for 3D printing, but a variety of other printing app's will be introduced as well. This course is offered in the **fall and spring semesters. Students who are interested in taking Intro to Engineering and Physics of Sports will be given priority for the class. (.5 credit)***



## Introduction to Engineering - 470



*This is a first year engineering course intended to build upon the skills developed in Introduction to Design. Students will apply this knowledge into the design and creation of various civil, mechanical, and environmental engineering projects. **Prerequisite:** pass Introduction to Design with a minimum of 75 (.5 credit)*

## Physics in Sports - 438



*This is a semester-long course intended for students interested in studying physics and its role in athletics. This course will cover introductory level physics concepts with a focus on conceptual understanding. Students will also explore the science behind sports equipment and how engineering has lead to advancements in sports over time. A major component of this course will be designing and testing 3D models. Topics covered in this course will include: kinematics; force and Newton's laws, work, energy, and power; momentum; rotational motion; mechanical waves; fluids; and simple circuits. **Prerequisite:** pass Introduction to Design with a minimum of 75 (.5 credit)*

## Advanced Design - 478



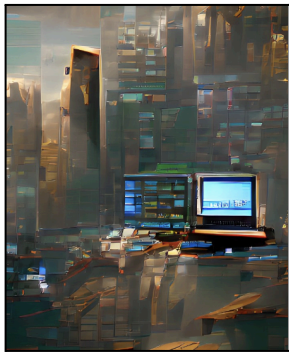
*This course is a semester-long course for students interested in building upon their skills learned in Introduction to Design. Students will explore more advanced CAD programs such as Sketchup, Shapr3d, and Fusion 360. The use of Apple Pencils with the iPads will be incorporated as part of the process of design. As students develop their CAD abilities they will also work with Adobe Suite Apps to create 2D graphical designs. Throughout the course, students will be using a variety of 3D printers, 3D pens, and will be learning about Laser Engraving as a method of modeling. This course is offered in the Fall and Spring semesters. **Prerequisite:** pass Introduction to Design with a minimum of 75 (.5 credit)*

## Mechanical Engineering - 483



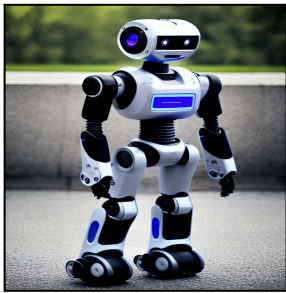
*Mechanical Engineering is an advanced course that will build off skills learned in physics, math, and pre-engineering classes. Students will explore the fundamental areas of mechanical engineering, including mechanics, thermodynamics, materials science, and design. Through a combination of theoretical lectures, hands-on laboratory experiments, and practical projects, students will develop a strong foundation in the principles of mechanical engineering. **Prerequisites** - successful completion of AP Physics 1 or CP Physics, and Algebra 2 (.5 credits)*

## Computer Applications - 818



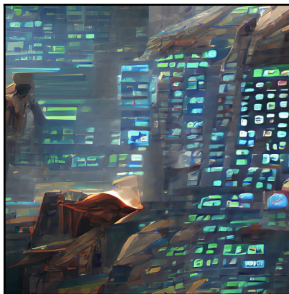
*This course will explore topics related to digital citizenship, developing skills and awareness to help students engage in appropriate behavior and take ownership of their digital lives. This will include delving into social media usage and learning how to write emails appropriately. Students will also develop skills using common computer applications, including (but not limited to) Google Suite, Apple, and Adobe applications that will be used throughout high school and beyond. As digital organization is a vital skill in the Information Age, students will also learn good habits to get, and stay, digitally organized. (.5 credit)*

## Robotics - 475



*This one-semester, hands-on class will teach students the basics of robotics. Focusing on small-scale robots, students will learn basic coding, design and building techniques.  
**Prerequisite: 11th & 12th grade only (.5 credit)***

## Project Management - 616



*Students will explore key concepts such as project initiation, planning, execution, monitoring, and closure. They will gain an understanding of project scope, time management, budgeting, risk assessment, and communication strategies. Through a combination of theoretical concepts and practical applications, students will develop essential skills in leadership, communication, problem-solving, and teamwork.  
**Prerequisites - 11th & 12th grade only (.5 credit)***

## Human Development

*Human development courses are built on the “Holistic Wellness” approach. This approach recognizes the symbiotic relationship among physical, mental / intellectual, emotional, social and spiritual health. Because health issues are so dynamic, HD courses strive to give students the skills, resources and knowledge to be healthy, happy, lifelong learners. Students are encouraged to think for themselves, be knowledgeable consumers and problem solvers and to make educated decisions.*

## Health - 905



*The Health education course acquaint students with attitudes, values, and practices surrounding the topics of health and wellness. Students learn to make positive, educated decisions associated with mental, physical, social and emotional wellness. Topics include (but are not limited to) drug use and abuse, conflict resolution, nutrition, reproductive health and disease prevention. Students develop the critical thinking skills required to make educated decisions surrounding health and wellness. Health is a semester-long course required of all students. (.5 credit)*

## Physical Education I - 901



*This course introduces students to “lifetime” sports, recreation and games. The curriculum focuses on fitness education and motor skill development for the purpose of improved individual health and encouraging participation for a lifetime. Emphasis is placed on certain health-related fitness (HRF) areas known to have a great impact on one’s quality of life. Activities may include golf, archery, racquet sports and volleyball. PE I is a semester-long course required of all students. (.5 credit)*

## Physical Education II - 900



*Good fitness habits as a youth translate to a healthier, more satisfying adulthood and higher overall quality of life. In PE II we will concentrate on fitness and being active. For lifelong fitness, it is important to find activities that you will enjoy and that will make you a healthier person. The course goal is to expose students to a wide variety of fitness activities such as aerobics, weight lifting, yoga, pilates, medicine ball, physioball and calisthenics, as well as active recreational activities such as mountain biking and canoeing. This introduction to activities, along with a strong knowledge base, will enable you to make individualized choices to improve your well-being based on your own strengths and weaknesses. PE II is a semester-long course required of all students. **Prerequisite: PE I (.5 Credit)***

## Physical Education III - 910



*This semester-long elective course engages students in a variety of lifelong activities. The curriculum focuses on sportsmanship, teamwork, cooperation, fitness education and motor skill development for the purpose of improving individual health and encouraging participation for a lifetime. **Prerequisites: PE I and PE II (.5 Credit)***



## Introduction to Medical Concepts - 908



During this course, students will become acquainted with general medical concepts including, but not limited to, general medical illnesses and care, vital sign techniques and other biometric tests, common medical terminology as well as an introduction to blood pressure, heart and lung sounds. Students will have the opportunity to earn his/her First Aid/CPR/AED certification from the American Heart Association. Students will have the opportunity to job shadow with healthcare professionals at Northern Light Seabrook Valley Hospital and gain clinical experience with patient assessment and treatment. This class requires vaccinations including flu, covid and a negative TB test in the last year. Should have documentation into the academic office by the end of November. This is a junior and senior level class. Special permission may be given to a sophomore that has met the prerequisites. **Prerequisites: PE II and Health (.5 Credit)**

## Introduction to Sports Medicine - 903



During this course, students will get an introduction to the foundations of providing health care to athletes and physically active individuals. Students will learn the basics of prevention, assessment, and management of injuries, rehabilitation and emergency care. The course will cover basic anatomy, pathology and kinesiology. This course includes labs where students will have the opportunity to learn by doing the assessments, taping and various aspects of emergency care. The course will also look at the various emerging practice areas for the athletic trainer. **Prerequisites: PE II and Health (.5 Credit)**

## Jobs for Maine's Graduates (JMG) Gr 9, 10, 11 - 209 / Gr. 12 - 201



Initially created for high school seniors as a school-to-work program, JMG has evolved into an organization serving more than 5,000 students per year in more than 85 school-based sites. Through JMG programs, high-school and middle-school students discover their individual talents, develop skills, and seize opportunities to achieve their personal potential. JMG at MCI offers a venue for students to interact with employers, community-based organizations, and post high school opportunities. The JMG program teaches more than 37 core competencies comprising six skill sets: personal skills, leadership skills, communication skills, job attainment skills, job success skills, and career development skills. JMG is successfully preparing Maine's young people to be responsible and productive employees, customers, and citizens. MCI offers JMG for grades 9-12. The JMG teacher will interview every student before acceptance to the program. **(1 Credit)**

## Outside Maine - 912



Outdoor ME is a continuation of many of the outdoor activities introduced in PE2 as well as additional activities to get outside in Maine. Geocaching, orienteering, survival skills, fly tying as well as fly casting, fishing skills, bird ID and plant ID are all possible units depending on time and group interest. Our focus will be getting outside and moving in a state known for its natural beauty! All levels of outdoor experience are encouraged to join the class. **Prerequisite: PE II (.5 Credits)**

## Visual and Performing Arts

MCI offers a variety of instruction and opportunities within the fine arts. Art, music, drama, and dance all help to build a sense of community and contribute to understanding and appreciating diverse cultures. Beyond the classroom, students are able to develop their individual talents, participate in performances and displays and compete for regional awards.

### Art

#### Studio Foundations I - 807



No prior art experience needed. In Studio in Foundations One students will explore the elements of art and principles of design, art techniques, different mediums, as well as strategies to improve artistic skills. Students will explore the history of art and design, while creating artwork that uses similar historical media and techniques. **(.5 Credit)**

#### Studio Foundations II - 808



This course is a continuation of Studio in Foundations One. Students will continue to explore the art elements and principles of design, art techniques, different mediums, as well as strategies to improve visual arts skills while furthering their knowledge of art history. Focus will be made on portfolio development for college bound art students, both physically and digitally. **Prerequisite: Studio Foundations I (.5 Credit)**

#### Ceramics - 866



This course is designed to meet the Maine Learning Results for the Visual Arts. A. Disciplinary Literacy, B. Creation, Performance and Expression, C. Creative Problem-Solving, D. Aesthetics and Criticism and E. Visual and Performing Arts Connections. Course content promotes the National Common Core Learning Standards while incorporating the Maine Learning Results for the Arts to ensure effective and meaningful learning experiences. Art units follow a historical pathway and are introduced sequentially. This gives us the opportunity to reinforce art content, to build visual/verbal literacy, and to introduce important art vocabulary. Art lessons have been designed to develop the student's ability to think creatively/critically, communicate effectively, and work collaboratively to solve creative problems. **Prerequisite: Studio Foundations I (.5 Credit)**

## Pottery (Ceramics II) - 858



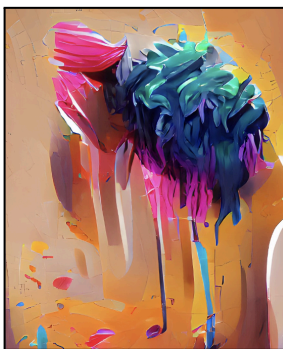
This course is designed to meet the Maine Learning Results for the Visual Arts. A. Disciplinary Literacy, B. Creation, Performance and Expression, C. Creative Problem-Solving, D. Aesthetics and Criticism and E. Visual and Performing Arts Connections. Course content promotes the National Common Core Learning Standards while incorporating the Maine Learning Results for the Arts to ensure effective and meaningful learning experiences. Art units follow a historical pathway and are introduced sequentially. This gives us the opportunity to reinforce art content, to build visual/verbal literacy, and to introduce important art vocabulary. Art lessons have been designed to develop the student's ability to think creatively/critically, communicate effectively, and work collaboratively to solve creative problems. **Prerequisite: Ceramics I (.5 Credit)**

## Drawing - 704



This course is designed to meet the Maine Learning Results for the Visual Arts. A. Disciplinary Literacy, B. Creation, Performance and Expression, C. Creative Problem-Solving, D. Aesthetics and Criticism and E. Visual and Performing Arts Connections. Course content promotes the National Common Core Learning Standards while incorporating the Maine Learning Results for the Arts to ensure effective and meaningful learning experiences. Art units follow a historical pathway and are introduced sequentially. This gives us the opportunity to reinforce art content, to build visual/verbal literacy, and to introduce important art vocabulary. Art lessons have been designed to develop the student's ability to think creatively/critically, communicate effectively, and work collaboratively to solve creative problems. **Prerequisite: Studio Foundations I (.5 Credit)**

## Painting - 852



This course is designed to meet the Maine Learning Results for the Visual Arts. A. Disciplinary Literacy, B. Creation, Performance and Expression, C. Creative Problem-Solving, D. Aesthetics and Criticism and E. Visual and Performing Arts Connections. Course content promotes the National Common Core Learning Standards while incorporating the Maine Learning Results for the Arts to ensure effective and meaningful learning experiences. Art units follow a historical pathway and are introduced sequentially. This gives us the opportunity to reinforce art content, to build visual/verbal literacy, and to introduce important art vocabulary. Art lessons have been designed to develop the student's ability to think creatively/critically, communicate effectively, and work collaboratively to solve creative problems. **Prerequisite: Studio Foundations I (.5 Credit)**

## Discovering Art History - 889

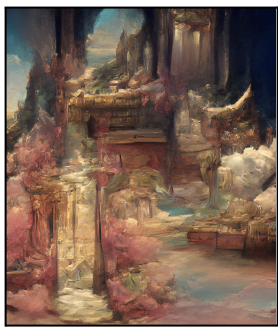


This course is designed to meet the Maine Learning Results for the Visual Arts. A. Disciplinary Literacy, B. Creation, Performance and Expression, C. Creative Problem-Solving, D. Aesthetics and Criticism and E. Visual and Performing Arts Connections. Course content promotes the National Common Core Learning Standards while incorporating the Maine Learning Results for the Arts to ensure effective and meaningful learning experiences. Art units follow a historical pathway and are introduced sequentially. This gives us the opportunity to reinforce art content, to build visual/verbal literacy, and to introduce important art vocabulary. Art lessons have been designed to develop the student's ability to think creatively/critically, communicate effectively, and work collaboratively to solve creative problems. **(.5 Credit)**



## *Drama*

### Technical Theatre I - 970



*This course provides students with a hands-on approach to stagecraft. Students will build sets, learn scenic painting techniques, and create properties, costumes and makeup designs for MCI Drama productions. Students will also serve as the run crew for MCI Drama productions and will learn stage management techniques, as well as lighting and sound design and operation. (1 Credit)*

### Technical Theatre II - 873 / III - 90408 / Advanced - 872



*This course provides students with a hands-on approach to stagecraft. Students will build sets, learn scenic painting techniques, and create properties, costumes and makeup designs for MCI Drama productions. Students will also serve as the run crew for MCI Drama productions and will learn stage management techniques, as well as lighting and sound design and operation. **Prerequisite: Technical Theatre I or Instructor's Permission with successful completion of one of the following courses: Play Production, Actor's Studio, Stage and TV Makeup, Costume Design or Festival Theatre Ensemble (1 Credit)***

### Stage and TV Makeup I - 965



*What is makeup? When was it first used and for what reason? How has makeup evolved through history? This hands-on semester-long course will cover the basic techniques of theatrical makeup by exploring makeup materials, color and light, and modeling techniques in the development of makeup designs for youth, middle and old age, historical persons, stylized faces, clowns, animals, and fantasy makeup. Through practical application on themselves, students will demonstrate skills and techniques of the various materials presented in the course, build resources and be able to complete character analysis for makeup design and technique. (.5 Credit)*

### Stage and TV Makeup II - 976



*Building on the techniques and skills learned in Stage and TV Makeup 1, students will further their skills in the use and application of make up for performance settings. **Prerequisite: Stage and TV Makeup I (.5 Credit)***

## Social Theater - 974



*Social Theatre Class is an interactive exploration of local and global issues affecting today's high school students: bullying, cyber bullying, acceptance, risk-taking, school violence and discrimination. Students will build community, heal divisions and shatter stereotypes through class discussions, guest speakers, videos and selected play readings. (.5 Credit)*

## Actor's Studio I - 931



*Have you ever wondered what an actor does? The mission of this semester-long class is to awaken the students' imagination, emotion and intellect while introducing fundamental skills and tools required for developing strong communication skills. Students will build self-awareness, develop imagination and concentration, learn the actor's vocabulary, and demonstrate the ability to be honest and committed in their acting. Coursework will include: Improvisation, Comedy Sketch Work, Mask Acting, Voice, and Movement. (.5 Credit)*

## Introduction to Costume Design - 937



*This is a beginning course and workshop designed for students who are interested in learning the requirements, process and expectations for costume design. Using various techniques, students will develop designs and costumes through a process of character analysis, script analysis, research, budgeting and director's vision. Period research, design, and rendering skills will be fostered through practical exercises. Instruction will include: basic costume construction, including drafting and draping, how to use a straight stitch and serger machine. Other techniques offered will be dyeing, fabric selection, draping, flat pattern drafting, pattern manipulation, adaptation, fitting, and alteration. (.5 Credit)*

## Play Production - 982



*Play production class is for the student who has a sincere interest in continuing to grow as a theatre artist. This class will incorporate technical production work, acting, and all aspects of a theatrical performance. Students must seek permission from the course instructor for permission to take this course. **Prerequisite: Technical Theatre, Stage and TV Makeup, or Festival Theatre Ensemble (.5 Credit)***



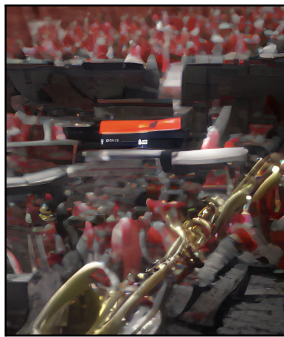
## Festival Theatre Ensemble - 988



*An honors level course which advances all theatre techniques learned in previous coursework (audition process/set design/acting/play production). Participants will take part in the MPA Drama Festival. Individual pieces will also be prepared for college auditions. **Students must audition for placement in this course. (.5 credit)***

## Music

### Concert Band (shared period w/ Concert Choir) - 950



*Students are expected to have a rudimentary reading ability of sheet music to join this class. Students enrolled in Concert Band will have an opportunity to explore music on their chosen wind, percussion, or string instrument and further develop music performance practices. Students will perform music in a variety of styles and settings ranging from serious wind ensemble literature at concerts, to popular music for home football and basketball games, to contemporary music written for cinematic collaboration. Performances are given in the community as well as outside of the community. Extended trips are planned once every four years to areas such as New York City or Virginia. **(1 Credit)***

### Concert Choir (shared period w/ Concert Band) - 960



*Open to all students. Students enrolled in Concert Choir will perform music from a wide range of styles. Concert Choir encourages students to develop confidence in their own singing voice in a positive and welcoming space. Repertoire will balance traditional choral music, contemporary choral literature, and musical theater favorites. Fundamental singing techniques will be covered, including: sight singing, pitch-matching, diction, projection, rhythm, musicality, and interval recognition. Performances are given in the community as well as outside of the community. Extended trips are planned once every four years to areas such as New York City or Virginia. **(1 Credit)***

### Instrumental Jazz Ensemble - 951



*Students must audition for placement in this course. Students are encouraged to explore improvisation. Students will learn how to be multi-genre artists in this course, studying the principles of jazz, bebop, hip-hop, rock & roll, funk, and the blues. Along with class time there are practices scheduled once a week after school. **Students must be enrolled in Concert Band to be eligible for Instrumental Jazz. (1 credit)***

## Vocal Jazz Ensemble - 961



*Students must audition for placement in this extra-curricular course. Students are encouraged to explore improvisation. Students will learn how to sing over chord changes and how to sing in the harmonic progressions and rhythmic structures of multiple different jazz genres. Students will participate in local jazz festivals and will tour once every four years to other states. This class takes place before or after school hours. **Students must be enrolled in Concert Choir to be eligible for Vocal Jazz. (1 Credit)***

## Guitar I - 966



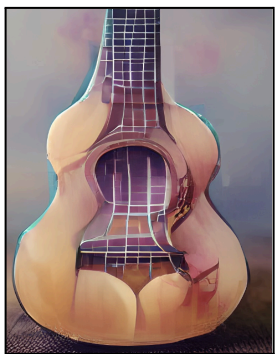
*Open to all students. This course is designed to introduce beginning students to the guitar as well as develop growth for students that already have some experience with the guitar. By the end of this course, students will be able to read popular music, folk music, and lead sheets. Students will learn how to play melodies and chords and the basic principles of improvisation. Students will also study basic music theory and basic songwriting skills. Instruction is both group and individual. Students may sign up for successive semesters of this course; however, they must have approval from the instructor in order to sign up for the course after the first semester. **(.5 Credit)***

## Guitar II - 962



*This class is for students that have experience playing guitar at a more advanced level. Beginning Guitar is a pre-requisite or meeting with the teacher individually to demonstrate a level and ability, including playing and recognizing chords, musical notation, and or tablature will suffice. Right hand strumming and fingerpicking technique will be assessed. We will use a variety of advanced guitar method books as well as tailoring your class experience based on particular interests with selections from the internet and dedicated guitar websites like Ultimate Guitar. **Prerequisite: Beginning Guitar (.5 Credit)***

## Ukulele - 959



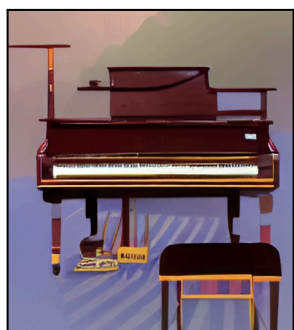
*Ukulele is one of the world's most accessible instruments. You will instantly learn a few chords and be able to play thousands of songs! No prior musical experience is necessary, and through class you will have perfected a skill that you can use privately or in groups in just about every corner of the world. You will learn the history of the instrument, how and what to look for in purchasing ukuleles, and all the materials online that Ukulele players all over the world share for FREE that you can access. We will search for recordings or videos featuring the wide range of Ukulele repertoire and performers. **(.5 Credit)***

## Piano I - 953



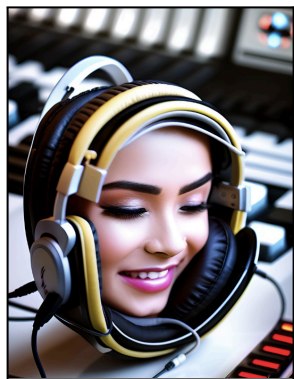
*This one-semester course is designed to stimulate student growth in music through the understanding of keyboard technique, basic theory and efficient practice methods. Everyone is welcome – from those without previous experience with music or piano to those who have previous experience. Students will be playing and progressing using the Piano Marvel app, which gives instant feedback, scores and virtual trophies for each level. Students learn to read music, play with accompaniment, and perform in a class recital. (.5 Credit)*

## Piano II - 949



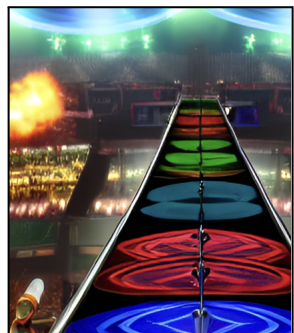
*This one-semester course is designed to stimulate student growth in music through the progression of keyboard technique, intermediate theory, sight-reading challenges and efficient practice methods. This course is for those who have reached level 3 or beyond in Piano Marvel. Students will be learning additional pieces in their preferred style to include classical, popular and soundtracks and will perform twice in class recitals. **Prerequisite: Piano I or Demonstration of Level (.5 Credit)***

## Music Theory & Composition / Digital Music - 958



*Music Theory and Composition is a hands-on Music class open to all students from beginner to expert level. Every student needs to bring their open mind, imagination and a desire to learn new and challenging things regarding musical composition and notational constructs. Music Theory and Composition takes you from a basic understanding of rhythm and sound patterns to the most complex usage of the Elements of Music: Rhythm, Dynamics, Melody, Harmony, Tone color, Texture, and Form. Both Sibelius notational software and Logic Pro digital music production will be utilized. (.5 Credit)*

## Modern Band - 990



*Modern Band like its counterparts of: Concert Band, Jazz Band, Pep Band, and Chorus is a fun and productive music class that focuses on group collaboration, individual expression and skill building in a safe and low anxiety environment. The difference is that Modern Band is accessible to all students as it requires no prior musical experience. Students will learn aurally, physically, and collaboratively by immediately participating in a “Music as a second language” approach. (.5 Credit)*



## Ballet

Members of the Bossov Ballet Theatre, MCI's resident ballet company, teach ballet. The theatre is both a performing company and international ballet school. In addition to classes offered during the day for academic credit, students may train after school.

### Bossov Ballet Theatre - 968



Students enrolled in ballet study, practice and perform classical ballet at a pre-professional level. Ballet students may earn 1 credit in physical education upon successful completion of 2 semesters of ballet. **Prerequisite: Audition with Bossov Ballet Theatre (2 Credits)**

## World Languages

World Language offerings are full year, one-credit college preparatory courses. The courses are designed, both in content and academic experience, to prepare students for further study at the post-secondary level and/or the ability to use the language in real life experiences. Successful world language students build a strong knowledge base by being active learners in class and supplementing their class experience with nightly assignments and studying. Courses require students to demonstrate communication skills appropriate to the language they study. Also, students will learn about, reflect on, discuss and share information about the cultures and society of users of the language. A World Language credit is not required for graduation.

### French I / CP - 511



French I students listen to, read, write and speak French through lessons built around the level I text (D'Accord) and supplemental materials. Level I students work to build the knowledge base of vocabulary and grammar structures and the skills for communication at a basic level. Students should expect to practice the communication skills each day in class and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. There are nightly assignments, and in some units students do unit projects, reports and/or presentations. **Students wishing to advance to level II French must conclude the year with a 70 or higher or have permission from the teacher. (1 credit)**

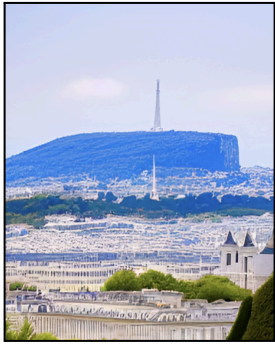
### French II / CP - 512



French II students increase their knowledge base of vocabulary and grammar and their listening, reading, writing and speaking skills through lessons built around the level II text (D'Accord) and supplemental materials. Students should expect to practice the communication skills each day in class, to complete nightly assignments, and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. In some units students do unit projects, reports and/or presentations. **Prerequisite: 70 or higher in French I or permission from teacher (1 Credit)**



### French III / CP - 513



*This course seeks to improve and refine students' skills and knowledge learned in French I and 2 as indicated by the American Council of Teachers of Foreign Language (ACTFL). Through daily practices in speaking, reading, writing and listening, students will be exposed to a higher degree of abstract concepts, vocabulary, and authentic materials presented in the target language. Through 90-100% target language instruction, interpretation of short films and short novels, analytical discussions, cultural comparisons and essays, students will see themselves immersed in the language which will provide the necessary exposure to gain more confidence as well as more authentic and spontaneous production than in the previous two levels. Students work from the D'accord level 3 text, the Thèmes AP level text, as well as a short novel that changes with each year. Students will be assessed through written exams, oral presentations, role plays, and daily participation. **Prerequisite: 70 or higher in French II or permission from teacher (1 Credit)***

### French IV / CP - 514



*Combining two traditionally separate levels, this course seeks to improve and refine students' skills and knowledge learned in French 1, 2, and 3 as indicated by the American Council of Teachers of Foreign Language (ACTFL). Through daily practices in speaking, reading, writing and listening, students will be exposed to a higher degree of abstract concepts, vocabulary, and authentic materials presented in the target language. Through 90-100% target language instruction, interpretation of short films and short novels, analytical discussions, cultural comparisons and essays, students will see themselves immersed in the language which will provide the necessary exposure to gain more confidence as well as more authentic and spontaneous production than in the previous two levels. Students work from the D'accord level 3 text, the Thèmes AP level text, as well as a short novel that changes with each year. The course ends the year with a thematic focus on "The Other," in the purpose of developing student awareness of the globalized world and the growing need for empathy in the 21st century. Students will be assessed through written exams, oral presentations, role plays, and daily participation. **Prerequisite: 70 or higher in French III or permission from teacher (1 Credit)***

### Italian I / CP - 540



*Italian I students listen to, read, write and speak Italian through lessons built around the level I text (D'Accord) and supplemental materials. Level I students work to build the knowledge base of vocabulary and grammar structures and the skills for communication at a basic level. Students should expect to practice the communication skills each day in class and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. There are nightly assignments, and in some units students do unit projects, reports and/or presentations. **Students wishing to advance to level II Italian must conclude the year with a 70 or higher or have permission from the teacher. (1 credit)***

## Spanish I / CP - 521



*Level I Spanish focuses on building competency so that a student might successfully interact at a basic level to exchange information about individuals and interests. Our units of study are theme-based and include information, practice and performance of the communication skills each day in class, and information and practice to help students make cultural connections. There are nightly assignments. Assessment is in listening, reading, speaking, writing, knowledge base and cultural connections. In some units students do unit projects, reports and/or presentations. **Students wishing to advance to level II Spanish must conclude the year with a 70 or higher or have permission from the teacher. (1 credit)***

## Spanish II / CP - 522



*In level II Spanish, vocabulary is developed in theme-based units. Students develop an understanding of and the ability to use grammar, such as tenses and pronouns, that supports broader communication. Students should expect to practice the communication skills each day in class, to complete nightly assignments, and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. In some units students do unit projects and/or presentations. **Prerequisite: 70 or higher in Spanish I or permission from teacher (1 Credit)***

## Spanish III / CP - 523



*In level III, vocabulary is developed in theme-based units; the history, geography, culture and people of Spain are the areas of study for the units in Spanish III. The grammar base is expanded to help students produce and comprehend more sophisticated communication. Students should expect to practice the communication skills each day in class, to complete nightly assignments, and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. In some units students do unit projects and in others, reports and presentations. **Prerequisite: 70 or higher in Spanish II or permission from teacher (1 Credit)***

## Spanish IV / CP - 524



*Level IV units are built around investigation and discussion of social issues, and of cultural themes. Emphasis is placed on stating and supporting opinions. In level IV students continue to build upon their knowledge base of vocabulary and more advanced grammar structures. Students should expect to practice the communication skills each day in class, to complete nightly assignments, and to regularly demonstrate what they've learned through performances of those skills and knowledge base. These assessment performances are through listening, reading, speaking, writing, knowledge base and cultural connections. In some units students do unit projects, and in others, reports and presentations. **Prerequisite: 70 or higher in Spanish III or permission from teacher (1 Credit)***

## Other

### Teaching and Research Assistants

Teaching and Research Assistants are assigned by department and according to need. There is an application that must be filled out and submitted to the Academic Office for consideration by the associated Department Head. Students who wish to become teaching or research assistants are expected to behave responsibly, and to be of good character. Honesty and integrity are crucial to such positions. Teacher recommendation letters may be required. (.5 credit per semester)

### HPER

Health, Physical Education and Recreation assistants, or HPER assistants, are upper level students who must have completed one full credit of Physical Education. The Human Development Department faculty may allow up to two HPER students in each class (PE I, PE II, Health). These students will be responsible for a variety of tasks including daily attendance, classroom setup and breakdown, fitness testing, and teaching small sections within activity units. Students are expected to model characteristics of leadership, responsibility, independence, morals, sportsmanship, and ethical behavior. Students wishing to pursue a career in teaching, or in the fields of health, wellness and/or fitness are encouraged to apply for this course. Applications for enrollment are required. (.5 credit)

## Dual / Concurrent Enrollment Courses

*Dual enrollment courses are offered **for juniors and seniors only** through the University of Maine system, Maine Community Colleges, and Husson University. Students may enroll in up to 12 college credit hours per year (2 college courses per semester). Students also have the opportunity to take MCI-UMFK concurrent enrollment courses that are taught during the school day on MCI's campus. **Students interested in enrolling in dual/concurrent enrollment college courses MUST meet with their academic advisor and apply prior to the start of each semester.** Enrollment is subject to available courses and seats, a minimum GPA requirement of 85, and schedule availability. Applications to and acceptance into each college's program are required.*

### College Composition (UMFK) / CE - 2110



*College Composition is a concurrent enrollment writing course that is designed to build on a student's strengths as readers and writers. This class helps to further develop critical thinking skills, establish more research and writing strategies, and improve ability to determine, create, and communicate meaning. Students will learn to constructively relate their own ideas and perspectives to those of others and build clear, well organized arguments. During the writing process, students will expand inquiries beyond the personal into complex discussions in academic, literary, and public textual forms. In this seminar, students will learn to craft and pursue their inquiries as they engage in inventing, composing, and revising their writing, both individually and collaboratively. Concurrent enrollment is free for Maine public education students and at a reduced tuition rate for international and out of state students. This course is offered on MCI campus and students will receive 3 college credits from the University of Maine Fort Kent upon successful completion. **Open for seniors. (.5 MCI credit)***

### Introduction to Literature / DE - 2305



*This humanities course will provide students with the opportunity for personal growth and an insight into social problems as revealed through literature. Students will read and discuss a selection of short stories, plays, poems and novels. Prerequisite: A grade of "C" in ENG101 College Composition, or permission of instructor. **(.5 MCI credit)***

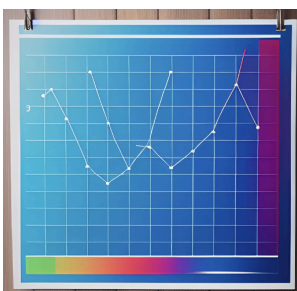


## Principles of Economics I (Macro) / DE - 2112



*This course examines functions of the United States economy, economic security, supply and demand, causes of unemployment and inflation, the nature of money and monetary policy, government fiscal policy, the federal debt, and international money matters. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*

## Principles of Economics II (Micro) / DE - 2113



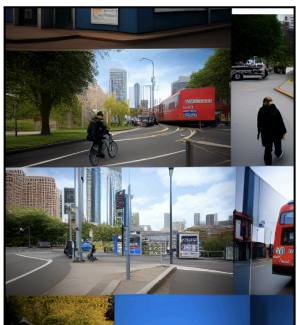
*Course content includes analysis of the interrelations of the individual consumer, the firm, and industry with regard to markets and pricing, monopoly power, the role of government, and income distribution. Prerequisite: Macroeconomics. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*

## Intro to Psychology / DE - 2116



*This course is an introduction and overview of the study of human behaviors. Lectures and discussion topics will include motivation, perception, historical roots, biological basis of behavior, scientific methods, human development, psychopathology, and theory. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*

## Intro to Sociology / DE - 2212



*A general scientific study of people and the dynamics of society with an emphasis upon the nature of culture, social institutions, social interaction, social units, and their influence on the individual. An overview of sociological concepts and perspectives is also presented. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*



## Quantitative Reasoning / DE - 2301



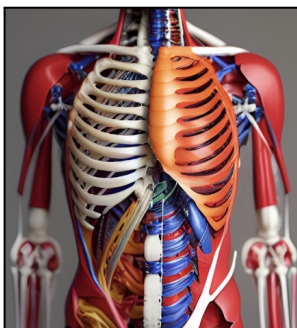
*Quantitative Reasoning is a one-semester course that provides a foundation in critical thinking, problem solving, and mathematical skills aligned with citizenship, workforce and real-world applications. The goals of the course are to engage students in meaningful mathematical experiences that will increase their quantitative and logical reasoning abilities and to strengthen the mathematical abilities that they will encounter in other disciplines. Developing and supporting communication and collaboration skills when doing mathematics will be a focus of the course. This course is particularly designed as a gateway for students entering non-STEM degree programs. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*

## Technical Math / DE - 2303



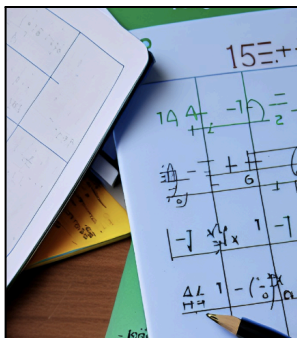
*This one-semester course will provide students with the concepts, principles, and problem solving techniques and skills needed in diverse occupational fields. Interactive techniques will be used which emphasize an understanding of the topics followed by applications of math concepts using problem solving computations. Topics covered include the numbering system, percents, charts, tables and graphs, calculations in both S. I. (metric) and the English systems, algebraic operations, simple equations, ratio and proportions, fundamentals of plane geometry, angular measure, triangles, area and volume calculations of various geometric shapes, introduction to right angle trigonometry. Must be taken in conjunction with Quantitative Reasoning. Students will receive 3 college credits upon successful completion. (.5 MCI credit)*

## Anatomy & Physiology (UMFK) / CE - 489



*Course material focuses on the structure and function of the eleven human body systems. It is a fast paced, content focused class with a small lab section. An emphasis is placed on learning proper terminology, as well as the integration of body systems. Four college credits will be awarded by University of Maine at Fort Kent upon successful completion of each semester for a total of 8 college credits. This course is offered on MCI campus and is open to students who have fulfilled the necessary prerequisites. **Prerequisite: Biology (1 MCI credit)***

## College Algebra (UMFK) / CE - 334



*CE College Algebra is a full year course that provides students with basic algebraic skills. Covers algebraic concepts including linear, fractional and quadratic and exponential equations and graphs. Also covers basic trigonometry for right triangles. Concurrent enrollment is free for Maine public education students and at a reduced tuition rate for international and out of state students. This course is offered on MCI campus and is open to students who have fulfilled the necessary prerequisites. Students will receive 3 college credits from University of Maine Fort Kent upon successful completion. **Prerequisite: Algebra II (1 MCI Math credit)***

## Aviation / DE 2800



Students enrolled in Aviation will enroll in a course curriculum outlined by the University of Maine at Augusta. The course work is taken through UMA primarily asynchronously. Students earn MCI science or elective credit as well as UMA college credit. Students wishing to obtain their private pilot's license will be eligible to earn licensure following completion of these courses. Flight hours are obtained over the summer. **Pre-requisites:** Open to junior and senior students in CP level humanities and with a GPA of 3.0 or higher. Students must meet with their academic counselor for approval. Dual enrollment is free for Maine public education students and at a reduced rate of for international and out of state students. There are additional course fees which include books, licensing fees and flight time fees. (.5 - 2 credits)

## AP4ME

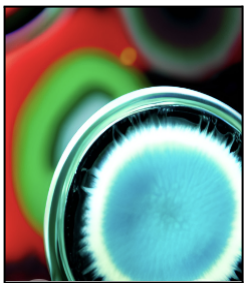
AP4ME offers Maine high school students throughout the state the opportunity to take Advanced Placement (AP) courses completely online, regardless of where they live or their school's ability to support AP courses. Should MCI not offer a particular AP Course, or if one does not fit into a students schedule, they will qualify for this offering.

### Advanced Placement (AP®) Art History - 889



AP Art History is a college-level Art History course. Students will explore the history of art across the globe from prehistory to the present. In addition, they will also analyze works of art through observation, discussion, reading, and research. **Prerequisites:** There are no prerequisites for AP Art History. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)

### Advanced Placement (AP®) Biology (at MCI)



AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer, and system interaction. **Prerequisites:** Students should have successfully completed high school courses in biology and chemistry. (1 MCI credit)

## Advanced Placement (AP<sup>®</sup>) Calculus BC (at MCI)



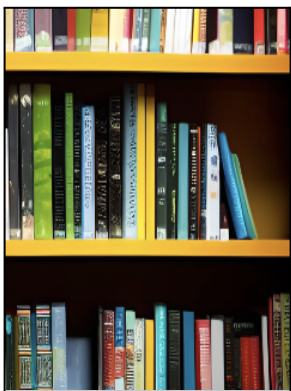
*AP Calculus BC is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. **Prerequisites:** All students should have successfully completed courses in which they studied algebra, geometry, trigonometry, analytic geometry, and elementary functions. In particular, they should understand the properties of linear, polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and piecewise-defined functions, as well as sequences, series, and polar equations. They should know how to graph these functions and solve equations involving them. They should also be familiar with algebraic transformations, combinations, compositions, and inverses for general functions. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) Computer Science A (at MCI)



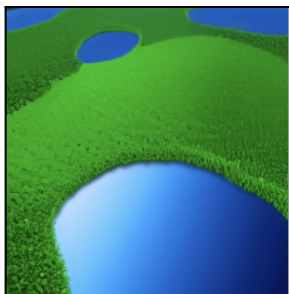
*AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. **Recommended Prerequisites:** High school courses in English and algebra, and familiarity with functions and the concepts found in the uses of function notation. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) English Language & Composition (at MCI) - 2323



*AP English Language & Composition: AP English Language and Composition is designed to be a college-level academic experience, with the intellectual rigor and workload consistent with a typical introductory college composition course. Students will read and carefully analyze a broad and challenging range of literary and nonfiction prose selections, deepening their awareness of rhetoric and how language works. Through close reading and frequent writing, students develop their ability to work with language and text with a greater awareness of purpose and strategy, while strengthening their own composing abilities. Students frequently confer about reading and writing with their classmates and with the teacher. Due to the rigor of the course, students should expect to spend approximately ten hours per week on coursework, depending on an individual's reading speed. **Prerequisites:** There are no prerequisites for AP English Language Composition. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) Environmental Science (at MCI) - 460



*AP Environmental Science is an introductory college course in environmental science. Students will explore and investigate the interrelationships of the natural world and analyze environmental problems, both natural and human-made. In addition, they will also take part in laboratory investigations and field work. **Prerequisites:** Students should have taken two years of high school laboratory science, including life science and physical science, along with at least one year of algebra before enrolling in AP Environmental Science. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) European History



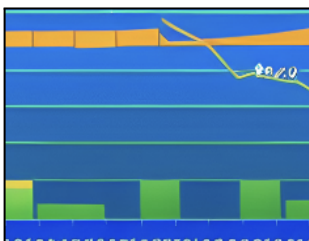
*AP European History is an introductory level college survey of modern European history. Students will study the cultural, economic, political, and social developments that have shaped Europe from c. 1450 to the present. In addition, students will analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. **Prerequisites:** There are no prerequisites for AP European History. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI Credit)*

## Advanced Placement (AP<sup>®</sup>) Human Geography



*AP Human Geography introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. It is an excellent course for preparing students to become geo-literate youth and adults. **Prerequisites:** There are no prerequisites for AP Human Geography. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) Macroeconomics



*AP Macroeconomics is an introductory college course in macroeconomics. Students will explore the principles of economics that apply to an economic system. Students will utilize graphs, charts, and data to analyze, describe, and explain economic concepts. **Prerequisites:** There are no prerequisites for AP Macroeconomics. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

## Advanced Placement (AP<sup>®</sup>) Music Theory





*AP Music Theory is an introductory college-level music theory course. Students cultivate their understanding of music theory through analyzing performed and notated music as they explore concepts like pitch, rhythm, form, and musical design. **Prerequisites:** Ability to read and write musical notation and basic voice or instrument performance skills. (1 MCI credit)*

### Advanced Placement (AP®) Psychology



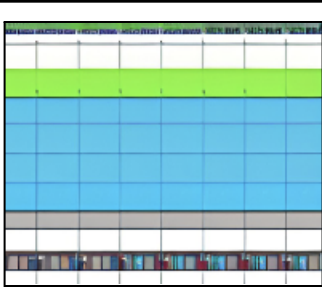
*AP Psychology is an introductory college-level psychology course. Students cultivate their understanding of the systematic and scientific study of human behavior and mental processes through inquiry-based investigations as they explore concepts like the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. **Prerequisites:** There are no prerequisites for AP Psychology. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

### Advanced Placement (AP®) Spanish Language & Culture



*AP Spanish Language and Culture is an intermediate level (typically third or fourth semester) college course in Spanish language. **Prerequisites:** There are no prerequisites, but students are typically in their fourth year of high-school-level study. In the case of native or heritage speakers, there may be a different pathway of study leading to this course. (1 MCI credit)*

### Advanced Placement (AP®) Statistics (at MCI)



*AP Statistics is an introductory college-level statistics course. Students cultivate their understanding of statistics using probability and simulation to describe probability distributions and define uncertainty in statistical inference. Students will also learn how to collect and analyze data using statistical reasoning to draw appropriate conclusions and justify claims. (1 MCI credit)*

## Advanced Placement (AP®) US Government & Politics (at MCI)



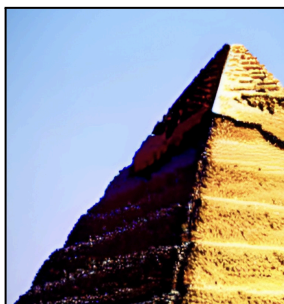
*AP U.S. Government and Politics is an introductory college-level course in U.S. government and politics. Students cultivate their understanding of U.S. government and politics through analysis of data and text-based sources as they explore topics like constitutionalism, liberty and order; civic participation in a representative democracy; competing policy-making interests, and methods of political analysis. **Prerequisites:** There are no prerequisite courses for AP United States Government and Politics. Students should be able to read a college level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

## Advanced Placement (AP®) US History (at MCI)



*AP U.S. History is an introductory college-level U.S. history course. Students cultivate their understanding of U.S. history from c. 1491 Common Era (CE) to the present through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like American and national identity; work, exchange, and technology; geography and the environment; migration and settlement; politics and power; America in the world; American and regional culture; and social structures. **Prerequisites:** There are no prerequisites for AP U.S. History. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

## Advanced Placement (AP®) World History



*AP World History is an introductory college course in modern world history. Students will study the cultural, economic, political, and social developments that have shaped the world from c. 1200 Common Era (CE) to the present. Students will also analyze texts, visual sources, and other historical evidence and write essays expressing historical arguments. **Prerequisites:** There are no prerequisites for AP World History. Students should be able to read a college-level textbook and write grammatically correct, complete sentences. (1 MCI credit)*

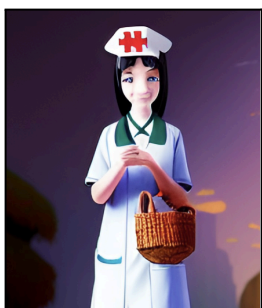
## Somerset Career and Technology Center (SCTC)

### **Automotive Technology I - 720 / II - 730**



This ASE (Automotive Service Excellence) certified program is designed to teach students how to repair and service gasoline and diesel-powered cars and light duty trucks. First year Auto Technology students are taught general repair work in a safe manner. From there, they will learn vehicle service, engine cooling, brakes, suspension, steering, and front-end alignment. Second year students move on to the electrical aspects of the automobile, such as the Starting and Charging System, Computerized Engine Control, Anti-lock Brakes and Air Bag Systems, Ignition, Fuel Delivery, Suspension, and Drivetrain. Seniors are able to be ASE Certified, Snap-on Multimeter Certified, and obtain their Maine Motor Vehicle Inspection License after graduating.

### **Certified Nursing Assistant - 728**



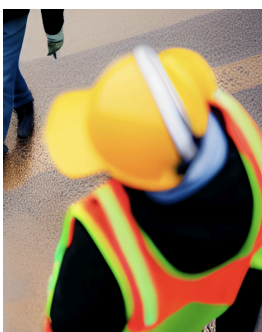
Students in this program gain knowledge in multiple health care careers through job shadows, community service projects, and clinical experiences. Students learn CPR, first aid, basic anatomy and physiology, and study the concepts of health promotion and disease prevention. SCTC's CNA program uses the State of Maine Nursing Assistant Curriculum which is approved by the Maine State Board of Nursing. Students also have the opportunity to earn up to three college credits from KVCC with completion of the program.

### **Commercial Truck Driving - 711**



This program qualifies students to test for the State of Maine CDL Class B Commercial Driver's Permit and License. Instruction is based on state laws, industry regulations, and equipment inspection required for licensing. According to Federal Motor Carrier law, students in the Commercial Truck Driving program must hold a current Class C automobile driver's license. Students must be 16 years of age to enter the program and must have a clean driver's record.

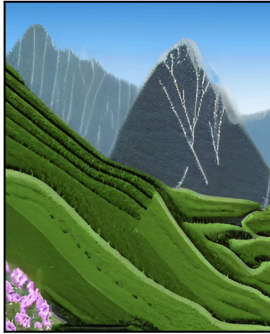
### **Cooperative Education - 741**



The Cooperative Education Program provides an opportunity for students to participate in an occupational training program for which facilities and courses are not otherwise available at SCTC. This program is designed for the student to spend part of the day at their sending school and part of the day "on the job." Students attend class with their instructor where job seeking, workplace skills, and personal finance is taught. An arrangement between the school, employer, student, and parents will then be created. The goal is to find training stations that will meet the varying needs and interest and provide appropriate employment for the student.



The Culinary Arts program prepares students for a future in the food service industry. Students learn entry-level culinary skills as well as cooking and baking techniques. Students will learn by working in a professional kitchen environment at the high school. First year students focus on: Sanitation and Personal Hygiene; Kitchen Safety; Knife Skills; Standardizing Recipes; Basic Butchery; Mother Sauces; Proper Food Storage; Basic Cooking Methods; Working As A Team. Second year students focus on: Secondary Sauces; Advanced Butchery; Cost and Portion Control; Advanced Baking and Cooking Methods; International and Regional Cuisine. Second year students also have the opportunity to earn their ServSafe Manager certification.

**Digital Graphics I - 724 / II - 727**

Students in the Digital Graphics Program learn design concepts related to Graphic Design, Digital Photography, and Marketing. Students use professional software and equipment to design and produce a variety of projects including promotional displays, brochures, logos, signage, note pads, decals and custom clothing. In the second year, Digital Graphics students operate an in-house print shop, “DG Print Shop & Design Center.” By aligning “live jobs” for a variety of clients, students are not only able to apply and develop the skills they’ve acquired in the previous year of class, but gain skills in professionalism through real world experience.

**Early Childhood Education I - 738 / II - 739**

The Early Childhood Education Program is a two year course for students who are interested in working with young children. Students learn about child development and theory, psychology, curriculum development, child guidance and professionalism. Early Childhood students have the opportunity to earn 6-9 college credits; receive the State of Maine Early Childhood Assistant certification; enroll in the Maine Roads to Quality registry and the ECE career lattice; job shadow; become CPR/First Aid certified; train in various settings, including: Infant/toddler classrooms; Family child care centers; Child care facilities; Preschool; K-8 Elementary classrooms; Special education programs.

**Electrical Construction I - 723 / II - 733**

This course provides students with the knowledge and background that prepares them for a career in the electrical field. Students learn electrical safety, tools of the trade, wiring, conduit parts, and assembly. In the first year of this two-year program, students learn the basics of the National Electrical Code and the theory of electricity. Students work in the shop applying the six common wiring methods using industry required tools. During the second year, students continue to advance their studies of the National Electrical Code as well as learning to read blueprints. The students work outside of the shop on practical “live work” projects including, Service Entrance Equipment, Motor Starters, Motor Controls, Electric Heat, Solar Energy, and Programmable Logic Controllers (PLC’s). Seniors have the opportunity to receive a certification through the National Association of Home Builders.





The EMT course is an introduction to patient assessment skills. Upon successful completion of the course, students will earn 5 credits from KVCC for EMS 111 and be prepared to sit for the EMS Basic Certification Exam. Content includes: Management of airway and respiratory problems; Cardiopulmonary resuscitation; Techniques of oxygen therapy; Bleeding control and treatment for shock; Soft tissue injuries and fracture care; Principles of spinal immobilization; Fundamentals of triage and transportation of the sick and injured; Treatment modalities for a range of medical, obstetrical, pediatric, environmental and behavioral emergencies.

## **Pre-Engineering - 705**



This class exposes students to a variety of engineering fields, such as: AP Computer Science Principles (Coding); Structures; 3D Design; Robotics. With numerous hands-on projects, students learn how to apply the engineering design process. Some of the activities include the design and build of: Cardboard boats; Concrete canoe; Balsa wood bridges / truss; VEX robots to compete in challenges; Scale model wind turbine blades; Various projects using Solidworks and 3D printers; Coding using HTML, CSS and Javascript.

## **Residential Construction 721**



The Residential Construction Program is a two-year program that concentrates on the residential carpentry trade. Students learn to work cooperatively in groups to complete projects. They learn organizational and leadership skills that help them to be successful in the workplace. Throughout both years of the program, there is a strong focus on employability skills. In the first year, students receive instruction in the following units: Hand & Power Tools; Building Materials and Fasteners; Floor & Wall Framing; Roof Framing. During the second year, students receive instruction in: Construction Drawings; Energy Efficiency; Basic Stair Construction; Wall Systems; Career Opportunities; Practical Application of Skills.

## **Welding 737**



The Welding Program is held at the Cianbro Training Facility in Pittsfield. Students learn the importance of workplace safety as they train next to Cianbro employees to become certified as a welder. The National Center of Construction Education and Research (NCCER) provides the curriculum students follow as they learn different types of welding techniques and positions. Students progress at their own pace which allows everyone the chance to become proficient before progressing. The Welding Program can be either a one or two year program depending on a student's interests and ambitions. Students can earn the OSHA 10 Safety Certification, Cianbro Welding Certifications and NCCER credentials.