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The Mt. Ararat High School *Program of Studies* presents information about courses which may be taken towards a Mt. Ararat High School diploma. This publication is designed to inform students and parents as they plan with their future goals in mind.

Please note that some courses or other provisions described in this publication may turn out to be unavailable in 2012-13, depending on course enrollment, staffing, or other factors. For example, it is unlikely that courses with enrollments of fewer than 10 students will run.

Information on educational programming for students in grades 9-12 with documented physical, behavioral, and / or learning disabilities, as determined through Individualized Educational Plan (IEP) meetings, is available from the Special Services department at Mt. Ararat High School.

For additional information, contact the high school principal at Mt. Ararat High School, 73 Eagles Way, Topsham, ME 04086. Telephone: (207) 729-2951. Fax: (207) 729-2953.

Web site: <a href="http://www.mta75.org">http://www.mta75.org</a>

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#### ACADEMIC REQUIREMENTS AND GRADUATION

Please refer to MSAD No. 75 policy for more information on graduation requirements.

#### **CREDIT REQUIREMENTS**

Mt. Ararat High School operates on a block schedule involving 7 periods. Students earn credits when courses are passed; partial credits are not awarded. Students earn half credits for semester courses. Students in grades 9-11 earn quarter credits for each year's portion of the Advisory Program; students in grade 12 earn a half credit. In order to graduate, students must earn a minimum of 21.25 credits. Of the 21.25 credit total required to graduate, students must earn a minimum of:

- 4 credits in English (English I IV; qualified students may substitute AP English for English III and/or IV)
- 3 credits in Social Studies (Social Studies I III)
- 3 credits\* in Math (\*refer to the Mathematics section for details concerning courses required for graduation)
- 3 credits\* in Science (Science I-IV) (\*refer to the Science section for details on required science courses)
- 1 Credit in Fine Arts (all Music and Visual Arts courses and any fine arts English elective courses)
- 1 Credit in Physical Education (PE I plus either PE II or Outdoor Education)
- 1/2 Credit in Health
- 1.25 Credit through participation in and completion of the Advisory Program and the Capstone Project

For operational purposes, all students move to the next grade level at the conclusion of each year, progressing through Mt. Ararat High School's program as first-year, second-year, third-year, and fourth-year students. Typically, students graduate in four years. All third-year students, regardless of the number of credits they have earned, are required by the State of Maine to take the SAT in May. Note that students who attend Region Ten Technical High School prior to 11th grade are subject to modified graduation requirements. Additional information regarding credits, requirements, and course options is available through the school guidance office.

#### **BEYOND REQUIREMENTS**

In addition to satisfying graduation credit requirements, students and parents should consider the following:

- Students are encouraged to take classes that challenge their academic abilities.
- Students should keep their options open. Those considering post-secondary education, particularly two or four year colleges, should exceed the high school graduation requirements and take four years of mathematics and at least three years of a world language. Four years of mathematics study is strongly advised for those students who expect to enroll in a four year college or technical/scientific based community college or military programs.
- Students who seek to compete as Division I or II athletes must satisfy the NCAA Clearinghouse academic eligibility guidelines, and need to be aware of NCAA eligibility requirements. Contact the guidance office for more information or go to <a href="http://www.ncaa.com">http://www.ncaa.com</a>.

### ACADEMIC STANDARDS: COMPREHENSIVE ASSESSMENT OF ACHIEVEMENT IN REQUIRED SUBJECTS

Students demonstrate achievement of required subject area learning standards by successfully completing essential course tasks and associated common assessments. All students taking required high school courses of study in the required subject areas will complete these common assessments. Such multiple measures allow faculty to ascertain each student's academic achievement.

#### **ACADEMIC SUPPORT and REMEDIATION**

Mt. Ararat High School provides support and remediation for students who need help meeting the academic standards associated with required courses. Teachers may make themselves available to students who need academic help before and after school or at such times as teachers may designate in their schedules. Parents are urged to contact their child's teacher or the appropriate academic department heads for more information about academic support. Some of the available supports include Math Lab, Math Workshop, and student mentors in the Writing Center.

#### ADVANCED PLACEMENT: COURSES, EXAMINATIONS, AND POSSIBLE COLLEGE CREDIT

Students should keep in mind that they can earn possible college credit for AP coursework only by taking actual AP Exams. In accordance with the May AP Examination schedule, students taking courses designated "Advanced Placement" or "AP" are expected to take the AP Examination associated with each course. The academic transcripts of those students who elect not to take the corresponding AP Examinations are amended to read "Advanced" rather than "Advanced Placement." Students and their parents are encouraged to check the AP credit policies of particular colleges and universities by contacting the institutions or checking credit information through the College Board's website: <a href="http://www.collegeboard.com/ap/creditpolicy/">http://www.collegeboard.com/ap/creditpolicy/</a>

#### **COURSE REGISTRATION**

The serious business of course registration period for the 2012-2013 academic year begins with the publication of the *Program of Studies* and ends on the last day of school in June. During this time, students, parents, and faculty work together to determine student schedules for the following academic year. The entire process involves planning then making choices and commitments. Registrations influence the shape of the master schedule and the allocation of school resources such as faculty, staff, materials, and space.

#### Schedule-building

At the start of the course registration period, students consult with their advisors then with teachers of their current courses, who recommend subsequent courses and placements. If a teacher or department recommendation does not match a student's desired course or placement, that student's parents may override the teacher's recommendation, providing the student meets published course prerequisites. As initial registration activities proceed, students receive information on other courses (including electives and Region Ten Technical High School programs) through the *Program of Studies* and other means. Students may then select any additional courses.

#### Schedule review / adjustment

After the schedule-building phase of the course registration period, each student receives a preliminary schedule. Students must review their preliminary schedules with their parents and, as needed, with school counselors and other faculty. Modifications must be made prior to the June 2012 close of the course registration period.

#### Step-Up Day

This annual event is important for the entire school community. On this day, students receive course information from faculty that currently teaches the courses they are scheduled to take next year. Step-up day allows students the opportunity to request final changes in their selection of courses. The teaching faculty, guidance counselors, and school staff thus are better able to balance class sizes and provide an appropriate number of course sections.

#### Course registrations and schedules are considered final on the last day of school in June, 2012.

After the last day of school in June, a student's preliminary schedule becomes final. From that point on, a schedule may then be changed only when • a department head approves a different academic placement, •• a school counselor determines the existence of a situation that requires intervention in the affected student's best academic interest (for example, a student may need to address particular graduation requirements or may have assumed an inappropriate course load), or ••• a department head determines that course sections require balancing.

#### **ACADEMIC PLANNER**

Only specific courses required for Mt. Ararat High School graduation are listed. Consult course descriptions for detailed information. At least 1 elective credit must be in fine arts. Satisfactory participation in Advisory activities is required each year. Credits earned must total at least 21. 25. A minimum of 5 credits must be carried at all times.

First Year (9th grade / freshman)	
Academic English I	
Social Studies I	
Math (Algebra I, Academic Algebra I, Academic Geometry, or Adv. Geometry)	
Science I	
PE I	
Advisory	
Electives:	
Second Year (10th grade / sophomore)	
English II	
Social Studies II or AP European History	
Math (see the Math section for options)	
Science II	
PE II or Outdoor Education	
Advisory	
Electives:	
Third Year (11th grade / junior)	
English III or AP English	
Social Studies III (US History or AP US History)	
Math (see the Math section for options)	
Science (see the Science section for options)	
Advisory	
Electives:	
Fourth Year (12th grade / senior)	
English IV or AP English	
Advisory/ Capstone	
Flectives:	_

# Mt. Ararat High School Course / Credit Checklist for Graduation

NAME	IE PROJECTED YOG					
ADDRESS	TELEPHONE					
PARENT						
First HS year (grade 9)AdvisoryEnglishMath	Second HS year (gr. 10)AdvisoryEnglishMath	(gr. 11) Advisory _English	(gr. 12) Advisory _English_			
Science	Science	Math Science	Science			
Soc. St Phys Ed I Fine Arts	Soc. St PE II / Outdoor Ed Health	Soc. St Fine Arts World Lang	Soc. St. Fine Arts World Lang			
World Lang Elective	Fine Arts World Lang Elective	Elective	Elective			
year 1 total other	year 2 total other		year 4 total other	add'I total		
TOTAL CREDITS (min 3)						
DATE ENROLLED	FROM					
Required subjects ———— ———— ——————————————————————————	English I-IV (AP Englis Science Social Studies (1 Cred Mathematics Physical Education Fine Arts Health Advisory Program		may substitute for Englis	h III or IV)		

NOTES:

# ADDITIONAL PROGRAMS

### ADVISORY PROGRAM

1.25 credits (or approved equivalent)

1/4 credit per year grades 9-11, 1/2 Credit grade 12

The Mt. Ararat High School Advisory Program provides each student with an ongoing connection with a faculty member who can provide both academic and social support. Advisory activities include regular review of each student's academic progress, communication with parents, development of a post-secondary plan, discussion of school-wide issues, and other activities that build a sense of community and belonging within the school. The curriculum is provided electronically and all students keep a portfolio of completed requirements including Freshman transition activities, the Sophomore Passage Portfolio, Junior career and college searches. Senior year requirements for the Advisory program are:

- 1. Completion off a college visit at any post secondary institution
- 2. Completion of an application to any post secondary institution for experiential purpose only
- 3 Completion of a Capstone project.

COURSE # - 1000 grades 9-11; 1000SR grade 12

#### **EARLY COLLEGE COURSES**

Juniors and seniors may qualify to enroll in college courses at Southern Maine Community College, University of Southern Maine and University of Maine at Augusta. Students may take courses at the main campus of each of these colleges or on the Bath campus where SMCC and University College at Bath/Brunswick share the Midcoast Center for Higher Education. Interested students should check with their guidance counselor for information about eligibility, registration, and financial assistance. Course information for all Maine colleges can be accessed from Mt. Ararat's web page. Upon successful completion of a college course, students earn dual credit: 1 high school credit and 3 college credits which may be transferable upon graduation. Courses are intended to supplement, not replace, high school required courses. Course options at other nearby colleges, such as Bowdoin College in Brunswick, can be explored. See your guidance counselor for more information.

#### INDEPENDENT STUDY

A student may apply for Independent Study in order to pursue worthy educational goals that cannot be met through the regular academic program. Independent Study work is monitored and supported by a teacher who agrees to the student's request for such supervision. As part of the approval process, guidance services determine whether a course can be or could have been accessed through regular enrollment and whether the suggested study is educationally appropriate for the student to pursue. The appropriate academic department head reviews the time, faculty support, materials, credit and other provisions of the proposal and makes a recommendation to the Guidance counselor.

#### ENGLISH LANGUAGE DEVELOPMENT PROGRAM

The English Language Development Program serves referred students who demonstrate limited English proficiency due to cultural relocation or similar circumstances. Students receive guided individualized instruction in acquiring literacy and communications skills in English. Students work on listening, speaking, reading, and writing. English language learner support is also offered to students who are proficient in basic communications skills but lack the cognitive academic English proficiency level to function with success in regular classes. The teacher consults with content area teachers in order to select and modify appropriate materials. Work completed in the context of program instruction may apply to various state and school requirements by prearrangement with the appropriate department head and approval of the principal.

#### SPECIAL EDUCATION SERVICES

Special Services provides an integrated educational program for students with documented physical, emotional, and/or learning disabilities, determined through an Individualized Education Plan (IEP) meeting. Contact the Special Services office at Mt. Ararat High School for more detailed information. The MSAD #75 Special Services director can be reached at 729-1557.

# CAREER PROGRAMS

# **JOBS FOR MAINE'S GRADUATES (JMG)**

# **SCHOOL TO WORK**

1 Credit

Recommended level: 12

School to Work is a class for seniors that will help you acquire the skills needed to successfully transition into adulthood. Topics covered include the college application process, apprenticeship programs and job shadowing, career exploration, resumes and cover letters, the job search, job interviews, managing your money, health and nutrition, buying/maintaining a car, academic support, building and supporting healthy relationships, communication, community service projects, and teamwork. Activities are frequently hands-on. Classes are small and class discussions are common. School to Work provides an opportunity for you to figure out who you are, what you want for your future, what opportunities are available, and how to take advantage of them. **COURSE #6004** 

#### MULTI-YEAR PROGRAM

1 Credit

Recommended level: 9-11

The JMG Multi-Year Program is about you and your future. What interests you? What are you good at? What do you find challenging? How do you learn best? What makes for a successful team? Are you a leader? What can you do now to prepare for your future? To answer these questions, we will engage in hands-on activities, discussions, and community service projects. Classes are small with a strong focus on creating a safe supportive environment that allows the class to function as a team.

9<sup>TH</sup> GRADE - COURSE #6002 MULTI YEAR - COURSE #6003

### **INTERNSHIP**

Recommended level: 11-12

The internship program is for juniors and seniors who might benefit from an on-the -job experience to assist them in their post-secondary planning. Students who might be interested in such an experience should see their guidance counselor.

# **ENGLISH**

#### **Academic Planning Notes:**

- English credits required: 4 (English I-IV; AP English courses, comprised of introductory college level work, also count for required English credits.)
- In order to proceed to the next course in the required English sequence, students must complete specific common assessments associated with these courses that demonstrate their achievement of English language arts proficiency.
- Students beyond the first year of high school who need to complete the initial required English credit course take English IB.
- The scope and sequence of the English program means that students cannot take two required, sequenced English courses simultaneously for credit. However, 4th year students who need an additional English credit for graduation may, with all required approvals, enroll in Critical Reading and Writing at Merrymeeting Adult Education concurrent with their enrollment in English III or Technical English.
- Enrollment in Writing and Reading Lab III or IV courses requires English department referral. The courses are not available as student selections during course registration; a department referral is required.
- English electives do not satisfy state English requirements. However, Creative Writing applies to the state Fine Arts credit requirement.
- Academic English III is accompanied by a required lab. The lab requirement is waived for 4th year students.
- AP English courses are accompanied by a required lab.
- REGION TEN TECHNICAL HIGH SCHOOL ENGLISH course allows students with credit deficiencies in other required subjects to earn required state English credit at Region 10 and thus undertake or maintain involvement in their vocational program. However, course content, including unit scope and sequence and course assessments, differs from that of the Mt. Ararat High School English curriculum.
- Some course sections of **ACADEMIC ENGLISH I** and **SOCIAL STUDIES I** are linked through integrated course content. In these sections, students will experience interdisciplinary connections. Students will consider a variety of texts, both written and on film, linked to study in both courses. Reading is connected not only thematically but also through a consideration of how important ideas are expressed. Students are introduced to principles of literary and rhetorical analysis. All students in these sections will have the same Social Studies I/English I teachers.

#### **ENGLISH I**

1 Credit

9th grade (first year) students take the following course:

#### **ENGLISH I ACADEMIC**

The English I curriculum focuses on story structure and essay structure. Units guide students to an understanding of narrative and argumentative writing using short stories, novels, films, poetry, and plays. Work culminates in four requisite common assessments: (1) oral presentation and culture notebook, (2) historical fiction paper, (3) thematic essay, and (4) literary analysis of a Shakespearean passage. Students learn the distinction between revision and editing as they rewrite and improve grammar, punctuation and vocabulary. **COURSE #1132** 

**ENGLISH IB ACD** is the version of the English I course adapted for students in the second year and beyond. Activities, assignments and assessments address fundamental literacy skill development and essential thematic elements of the initial high school English course. **COURSE #1131** 

# **ENGLISH II**

Prerequisite: Academic English I or English IB

1 Credit

Students who have earned English I credit take one of the following two courses.

### **ENGLISH II ACADEMIC**

Students deepen their awareness and appreciation of literary form and meaning. They write and revise regularly as they learn how to build support for their ideas, observations, and positions. They also present and defend ideas in class discussions and group work. Students gather, synthesize, and shape information and opinions into an informed research project that culminates in an "I-Search" paper. Students confer regularly with their peers and teacher about their writing.

**COURSE #1144** 

#### **ENGLISH II ADVANCED**

Additional prerequisite: department screening including completion of summer work

Students who successfully complete this course will be prepared to undertake introductory college-level work in subsequent AP English courses. This course is intended for students with a notably strong interest in the study of language, literature, and writing who are ready to encounter intensive, accelerated work. As readers and writers, students consider various literary forms (essays, speeches, poems, fiction, drama), paying close attention to language features, form, and meaning. Students complete a major research project. Students confer regularly with their peers and teacher about their writing.

**COURSE #1146** 

### **ENGLISH III**

Prerequisite: English II

1 Credit; 1/2 credit for Academic English III Lab

NOTE: 4th year students are exempt from Academic English III: Critical Reading and Writing Lab.

Students who have earned an English II credit take one of the following two courses:

### ENGLISH III WRL (WRITING AND READING LAB) III

Additional prerequisite: English department referral

Students who need to strengthen writing and reading skills in an individualized workshop environment are referred to this computer lab-based course. Using available computer technology, students address topics that require research, interviews, writing, and revising. As a capstone to their work, each student writes a feature piece, usually a profile. Students also read and work with quality written texts and films in connection with their writing. They also develop on-demand writing skills. Students confer regularly with their teacher about their writing. **COURSE #1153** 

### **ENGLISH III ACADEMIC**

Must also take CRITICAL READING AND WRITING LAB (exceptions noted above) for an additional ½ credit

Students consider North American writing and culture through the study of essays, short fiction, poetry, and longer works such as *The Night Thoreau Spent in Jail*, *Montana 1948*, *Nickle and Dimed*, and *The Catcher in the Rye*. Works by accomplished women writers such as Walker, Berg, Kingsolver, Angelou, Tan, and Smiley are read and discussed during a community reading unit. Regular student writing for various purposes augments discussions and assigned readings. Listening, speaking, group work, and vocabulary skills are featured in course units and strands. Labs involve extensive work on close reading, vocabulary development and purposeful writing. Students confer regularly with their peers and teacher about their writing. **COURSE #1154 AND COURSE #1155S (English III Acd CRW Lab)** 

# **ENGLISH IV**

Prerequisite: English III

1 Credit

Students who have earned an English III credit take one of the following two courses:

# **ENGLISH IV WRL (WRITING AND READING LAB)**

Additional prerequisite: department referral

Students with demonstrated need to develop and strengthen individual writing and reading skills in a workshop environment are referred to this lab course. Each student is expected to fulfill individual and independent reading programs keyed to his or her interests and designed to develop reading proficiency. Students also consider quality written works and films linked to major course themes. Each student completes a senior paper. Students confer about their writing outside of class in the Writing Center. **COURSE #1162** 

#### **ENGLISH IV ACADEMIC**

Students in this capstone course prepare for further study by completing a college essay then exploring a compelling array of short stories, essays, poetry and longer literary works (plays and novels) such as *Kite Runner, Nickel and Dimed, A Raisin in the Sun, One Flew Over the Cuckoo's Nest, The Things They Carried, Death of a Salesman,* and *Hamlet.* Accompanying films include *Gran Torino, and Apocalypse Now.* The concepts of voice, turning points, human culture, and truth provide a focus for study. Major assignments occasion the development of language and film/image awareness as well as listening and speaking skills. Critical analysis and synthesis papers, including a senior paper, are completed in connection with readings. Students confer regularly with their teacher about their writing. **COURSE #1164** 

# ADVANCED PLACEMENT ENGLISH COURSES

Prerequisite: department screening, including completion of required summer work. Students must demonstrate readiness to undertake introductory college-level study through achievement in previous high school level English courses.

1 Credit; 1/2 Credit for AP English Labs

College-level credit or advanced college or university course placement may be earned depending on AP exam score and college or university policy.

# **ENGLISH LANGUAGE AND COMPOSITION AP**

Recommended level: 11-12

1 Credit:

ENGLISH LANGUAGE LAB AP carries an additional required 1/2 credit

Students in this introductory college-level course will have previously demonstrated strong writing and analytical skills. Students consider a broad and challenging array of prose selections and image-based texts concerning a wide range of important subjects. Through close reading, frequent writing, and purposeful inquiry, students develop their ability to work with language and deepen their understanding of rhetoric and argument. Students work extensively with nonfiction including essays, speeches, letters, memoirs, and other writings by authors such as Didion, Capote, Dillard, White, Woolf, Lincoln, Swift, Hazlitt, Twain, Orwell, Mead, King, Mairs, Murray, Sontag, Wolff, Oates, and Shakespeare. Students confer with teachers about their writing in the Writing Center and in class. The associated **AP ENGLISH LANGUAGE LAB** focuses upon purposeful argumentation, analysis of image-based texts, and the responsibilities of public discourse at the introductory college level. Students prepare for the Advanced Placement English Language and Composition Examination.

COURSE #1196 AND COURSE #1197S (ENGLISH LANGUAGE LAB AP)

#### **ENGLISH LITERATURE AND COMPOSITION AP**

Recommended level: 12

1 Credit:

ENGLISH LITERATURE LAB AP carries an additional required 1/2 credit

This introductory college-level course is for students with an exceptional interest in and commitment to the study of imaginative literature: fiction, poetry, and drama. Students will have previously developed the strong writing and analytical skills that are needed for careful study of literature at the introductory college level. Students consider and explore the features, meaning, and value of various literary texts and their relationship to contemporary experience as well as to the times in which they were written. Writing conferences are also held regularly outside of class times. A senior paper is required. The associated ENGLISH LITERATURE LAB AP focuses upon close reading of poetry, analysis of short prose selections, and critical analysis skills at the introductory college level. Students prepare for the Advanced Placement English Literature and Composition Examination. COURSE #1198 AND COURSE # 1199S (ENGLISH LIT & COMP LAB AP)

# **ENGLISH ELECTIVES**

NOTE: elective courses do NOT fulfill scope and sequence or credit requirements associated with English I-IV coursework. The first ½ credit earned in Creative Writing may be applied towards Maine's Fine Arts requirement.

#### CREATIVE WRITING

Prerequisite: satisfactory achievement in required English

May be taken for ½ credit in either the fall or spring semester. The .5 credit may be applied to the Fine Arts requirement.

Recommended level: 10-12

During the first semester of Creative Writing, students become more expressive writers by making fresh observations and associations and exercising imagination. They explore and produce poetry, prose, fiction, and nonfiction. Participants will create, share, and publish their own work. In the second semester of Creative Writing, students further explore and develop their voices by writing in several more challenging literary forms, typically focusing their efforts on poetry, fiction, creative nonfiction, or screenplays. **COURSE #1194S - semester** 

### **JOURNALISM**

1 credit full year course or may be taken for ½ credit in the fall semester only.

Recommended level: 10-12

The Journalism course is designed to introduce students to all facets of the journalist's craft: reporting, writing, design, graphics, photography, and multimedia. Emphasis will be placed on accuracy, brevity, clarity and reportorial responsibility. Students will also be introduced to the basics of layout and design through desktop publishing. Additional lessons will center on ethical decision-making and an appreciation of working in our multicultural society, with the goal of producing a monthly online school newspaper. **COURSE #1190 – full year; COURSE #1190S - semester** 

#### SHAKESPEARE'S HISTORY PLAYS

May be taken for  $\frac{1}{2}$  credit per in either the fall or spring semester.

Recommended level: 10-12

In addition to the famous tragedies and comedies typically studied in high school. Shakespeare also wrote numerous "history plays", in which he examined the nature of kingship, social order, and right rule – while paying tribute to the House of Tudor and especially to Queen Elizabeth I. We will examine several of these plays, including *Henry IV, Parts 1 and 2*; *Henry V; Richard III; Richard III; and Julius Caesar*, not only as works of literature, but also as political statements and as representations of a specific view of history. In so doing, we'll also consider how we view history and use it for our own purposes. **COURSE #1171S - semester** 

### SHAKESPEARE ON FILM

1/2 Credit: may be taken in either the fall or spring semester.

Recommended level: 10-12

This course allows students to do what Shakespeare actually intended for us to do – watch his plays! Students often protest of Shakespeare's work: "I don't understand the language!" That feeling of being left out of a cultural icon's work goes away once we really watch Shakespeare's words. Watching the film adaptations of the plays makes the texts more digestible, and enjoyable. Through the work of directors such as Welles, Olivier, Zefirelli, and Branagh we will explore the links between a director's adaptation of a Shakespeare play and the rich poetic language that we find in Shakespeare's texts. Through film analysis, we begin to see how the language of film can sometimes unlock the secrets of Shakespeare's world.

COURSE #1172S - semester

### THE LITERATURE OF SPORTS

1/2 Credit: may be taken in either the fall or spring semester.

Recommended level: 10-12

In the Literature of Sports course students will study and write essays on a significant body of sports literature, examining such topics as sports as character-building, sports hero types, hero-worship in fans, violence in sports, corruption in sports, racism and performance-enhancing drug use in sports, and so on. Weekly writing assignments will accompany reading as well as two major papers per quarter. Class participation is also of considerable importance.

**TEXTS:** The Norton Book of Sports (Plimpton); The Natural (Malamud); Friday Night Lights (Bissinger): Ice Time (Atkinson);

Only the Ball Was White (Peterson); Fall River Dreams (Reynolds) FILMS: "When We Were Kings" – "Hoosiers" – "Hoop Dreams"

COURSE #1191S - semester

#### UNDERSTANDING FILM

1 Credit, but may be taken for ½ credit per semester in the fall. Prerequisite for full year course is completion of fall semester.

Recommended level: 11-12

The Understanding Film course has three goals. First is to expand students' taste, so that they can become an audience for a wide range of films. Second is to expand their critical awareness of what goes on in movies, so that they can see more in what they watch. The third is to give them experience in making films, from creating scripts, to shooting and editing. Topics include: film as visual storytelling; genres such as film noir and the Western; film directors; and documentaries. Each semester students complete at least one major film project, spending considerable time out of class to shoot and edit.

COURSE #1180 - full year; COURSE #1180S - semester

# **VISUAL LITERACY**

1/2 Credit: may be taken in either the fall or spring semester.

Recommended level: 10-12

Photographs, advertisements, maps, websites, television programs and movies, artwork; we are constantly "reading" non-print texts for meaning. This course will provide the opportunity to analyze the visual messages being broadcast through understanding and evaluating the purpose, author, subject, medium and genre, composition, audience, and context which shapes those texts' meanings. Additionally, students will study and demonstrate principles of design to effectively capture and influence an audience. This work will make us better critical thinkers, consumers, and masters of the media messages

**COURSE #1195S** 

### **WEB TEAM**

Prerequisite: teacher screening

1 Credit, but may be taken for ½ credit in the fall only. Prerequisite for full year course is completion of fall semester.

Recommended level: 10-12

The Web Team is made up of students who, with coaching, support and direction from their teacher, create web pages. On the Web Team, students participate in a range of activities related to school-and-personal web site design, development, and revision. During the second semester Web Team students continue web site development activities, deepening their knowledge and skill as designers, information presenters, and communicators by working on more challenging projects at a more sophisticated level. Students may earn multiple credits as members of the Web Team.

COURSE #1192 - full year; COURSE #1192S - semester

### WRITING CENTER SUPPORT TUTORS

Prerequisite: permission of department Up to ½ credit may be earned per semester

Recommended level: 11-12

Working under the guidance of an English teacher, Writing Center support tutors help peers with their writing through supportive conversation about composition. Student tutors keep a journal of their experiences. Peer tutoring may be of particular interest to students who wish to contribute to our school community.

COURSE #1176S - semester

# **HEALTH**

#### **Academic Planning Notes:**

- Health credit required: 1/2
- · Specific course required: Health
- · Electives do not satisfy the state health credit requirement

#### HEALTH

1/2 credit

Recommended level: 10.

Health means more than just the absence of illness. This course is designed to help teens not only survive, but also thrive in a challenging world. Topics include mental health, stress management, growth and development, sexuality, CPR, nutrition, and issues surrounding drug and alcohol abuse. Students in this course must complete specific common assessments that demonstrate their achievement of learning standards. **COURSE#3379S** 

### **HEALTH ELECTIVES**

NOTE: these courses do NOT address Maine's health credit requirement.

#### EARLY CHILDHOOD EDUCATION

1/2 credit

Recommended level: 11-12 (Grade 10 with teacher permission)

This course, for students who see children in their future, promotes an understanding of the principles of guiding them in healthy learning and living. The physical, mental, emotional and social development of children, from infancy through schoolage, is studied. An on-site child play group gives students a chance to observe, study, and interact with toddlers and preschoolers. *NOTE: this course does NOT address Maine's health credit requirement.* **COURSE#3389S** 

#### **HEALTH FOR LIFE**

Prerequisite: Health

1/2 credit

Recommended level: 11-12

Living as a teenager in today's society, you all know that there are so many different issues, pressures, and challenges. This course will help you develop new and refined skills to deal with it all. The course will be much different from the required health education course. Our focus here will be about understanding the human experience. We will work towards understanding the impact of global and environmental health issues. We will explore dynamics of relationships and how to make them as healthy as possible. We will look at what is going on in your personal lives and help you to not only survive, but, thrive in your life after high school! One of the exciting things about this course is that the students will help to develop the structure and focal points. There will be a great deal of group discussion, group problem solving, and personal reflection.

This is a course for those of you who want to gain some real insight and ultimately develop some health skills for life!

NOTE: this course does NOT address Maine's health credit requirement. COURSE#3381S

#### INDEPENDENT LIVING

1/2 credit

Recommended level: 11-12

This course is designed to promote a healthy lifestyle with a focus on personal finance and consumerism. Students will acquire the knowledge and skills needed for living successfully on their own, as they focus on such topics as credit, income taxes, checking account maintenance, housing options, food purchasing and preparation, money management and others.

NOTE: this course does NOT address Maine's health credit requirement. COURSE#3383S

# **FIT FOR LIFE**

Prerequisite: Health

This course requires an essay application and a screening interview.

1 credit

Recommended level: 10-12 (9 with teacher permission)

Are you looking to make some drastic changes in your life? Maybe you need to shape up...or learn how to eat healthier? This might just be the course for you. In this year-long course, we focus on physical fitness, nutrition, and mental health issues. Overall, the goal is to help students develop new lifestyle skills to ultimately live healthier. In this course, students will work out regularly to improve their physical health, develop better eating habits by learning new techniques for food preparation and cooking, and incorporate new strategies to improve their self image and become FIT FOR LIFE!!

NOTE: this course does NOT address Maine's health credit requirement. COURSE#3380

# **MATHEMATICS**

#### **Academic Planning Notes:**

- · Mathematics credits required: 3
- Students who plan to attend a community college, four-year college or university are strongly advised to complete four years of mathematics.
- Typical sequence of courses for students who have successfully completed 8th Grade Math:
- √ Academic Algebra I
- √ Academic Geometry
- √ Academic Algebra II
- √ Pre-Calculus (and/or Statistics)
- Typical sequence of courses for students who have successfully completed Algebra I in the 8th grade:
- √ Advanced Geometry
- √ Advanced Algebra II
- √ Advanced Pre-Calculus
- √ AP Calculus (and/or AP Statistics)
- Typical sequence of courses for students who have demonstrated the need for additional classroom support and/or slower pacing to be successful in mathematics:
- √ Algebra I
- √ Geometry
- √Algebra II Part 1
- √ Algebra II Part 2/Trigonometry

NOTE: Students are placed in the above four courses through teacher recommendation or department head approval only.

- Actual student paths over the course of four years may differ from the above examples. Placement of students in the appropriate level of a course is determined by mathematics teacher recommendations, and is done on a yearly basis.
- Elective math courses do not satisfy mathematics credit requirements.
- All courses count for one credit unless otherwise noted.

#### **ALGEBRA I**

1 Credit

This course allows students to strengthen their understanding of Pre-Algebra concepts while studying topics in Algebra I. Students will have the opportunity to work with solving equations and inequalities in one variable, simplifying algebraic expressions, properties of exponents, linear equations and graphs. This course also includes integrated topics in geometry and statistics. **COURSE#1332** 

#### ACADEMIC ALGEBRA I

1 Credit

This course includes topics in algebra such as solving equations and inequalities in one variable, exponents and radicals, radical expressions, linear equations in two variables, and quadratic equations. The course also integrates topics from geometry, probability and statistics. Reading and problem solving are emphasized throughout the course. **COURSE #1334** 

# **ALGEBRA II, PART 1**

Prerequisite: Geometry

1 Credit

This course allows students to study a subset of topics from the Algebra II curriculum over the course of a full year. Topics include linear relations and functions, linear systems, matrices, polynomial operations and functions, quadratic functions, and an introduction to rational functions. Students who wish to complete the study of Algebra II should plan to follow this course with Algebra II Part 2/Trigonometry. **COURSE #1352** 

### **ACADEMIC ALGEBRA II**

Prerequisite: Geometry

1 Credit

This course is intended for students who have demonstrated a sound understanding of the concepts studied in previous mathematics courses. There will be more emphasis on the structure of mathematics than in the Algebra II course. Topics such as trigonometry, logarithms, exponents, and complex numbers will be presented in depth. **COURSE #1354** 

### **ADVANCED ALGEBRA II**

Prerequisite: Advanced Geometry; teacher screening

1 Credit

This course is intended for students who are ready for a more intensive study of algebra in preparation for Advanced Pre-Calculus and AP Calculus. In addition to the topics introduced in Academic Algebra II (above), students will study polynomial, radical, rational, exponential, and logarithmic functions and their graphs in depth. This course requires summer work.

**COURSE #1356** 

### **ALGEBRA II, PART 2 / TRIGONOMETRY**

Prerequisite: Algebra II Part 1 or equivalent

1 Credit

This course provides students an opportunity to strengthen their understanding of algebraic concepts and reinforce skills developed in the first part of Algebra II. Additional topics studied include radical equations and complex numbers, conic sections, rational functions, sequences and series, probability, and trigonometry. **COURSE #1357** 

#### GEOMETRY

Prerequisite: Algebra I

1 Credit

This course follows Algebra I. It covers basic geometric topics using an activity approach. Students are encouraged to explore and investigate using a variety of manipulatives and computer software, such as the Geometric Sketchpad. Topics covered include vocabulary, plane and solid figures, measurement, area, perimeter, volume, graphics, transformations, and trigonometry. Upon completion of this course, students would usually take Algebra II as the third course in a three-year sequence. **COURSE #1342** 

#### ACADEMIC GEOMETRY

Prerequisite: Algebra I

1 Credit

This course will help students develop an understanding of geometric figures and their properties. Skills in drawing, visualizing, and using geometric tools will be emphasized. Real-life applications will be included. Throughout the course algebra, probability, and statistics will be integrated with geometric topics. **COURSE #1344** 

### ADVANCED GEOMETRY

Prerequisite: Algebra I in the 8th grade

1 Credit

The course content is similar to that of Academic Geometry, but with additional emphasis on problem solving, trigonometry, and solid geometry. **COURSE #1346** 

#### PRE-CALCULUS

Prerequisite: Advanced Algebra II or Academic Algebra II with a grade of C or better

1 Credit

This course is intended for students who wish to continue their study of mathematics and prepare for post-secondary requirements. Topics such as polynomial functions, advanced topics in curve sketching, analytic geometry, exponential and logarithmic functions, and trigonometric functions are studied. The course will provide the necessary background for college level calculus. **COURSE #1394** 

#### ADVANCED PRE-CALCULUS

Prerequisite: Advanced Algebra II; department screening

1 Credit

This course is intended for students who plan to study calculus, Statistics or other college math courses in their senior or college years. All important pre-calculus topics are addressed, including but not limited to: polynomial functions, analytic geometry, exponential and logarithmic functions, complex numbers, trigonometry functions, sequences and series, matrices, combinatorics, probability and an introduction to calculus. *This course requires summer work.* **COURSE #1396** 

### **CALCULUS**

Prerequisite: Pre-Calculus or Advanced Pre-Calculus with a grade of C or better

1 Credit

This course is offered to students who wish to prepare for post-secondary study in fields such as engineering, mathematics, physics, and applied science. Students will study topics such as limits, derivatives and their applications, and integral calculus with applications. *This course requires summer work.* **COURSE #1392** 

#### **AP CALCULUS AB**

Prerequisite: Pre-Calculus or Advanced Pre-Calculus; department screening

1 Credit

This course is offered to students who want to prepare for a field requiring an extensive background in mathematics. Students will study all topics addressed in a first semester college calculus course, including limits, derivatives and integral calculus with applications. Students are prepared for the Advanced Placement Calculus Examination, which may enable them to earn college course credits. *This course requires summer work.* **COURSE #1365** 

# **AP CALCULUS BC**

Prerequisite: AP Calculus AB or instructor's permission

1 Credit

This course is offered to students who wish to enter college prepared to study multivariable calculus. The course will strengthen the student's mastery of the AB Calculus syllabus and extend to parametric, polar, and vector functions. It will expand the student's knowledge and understanding of limits, graphical behavior, derivatives, integrals and differential equations. This course will also introduce the student to polynomial approximations and series. Students prepare for the Advanced Placement BC Calculus Examination. *This course requires summer work.* **COURSE #1366** 

# MATH ELECTIVE COURSES

Elective courses do **not** satisfy mathematics credit requirements.

#### COLLEGE READINESS MATH

Prerequisites: Algebra 1, Geometry, Algebra II

1 Credit

This course is designed to deepen the core knowledge expected of students in college entry level mathematics courses. It provides the skill reinforcement and support needed for success in the transition from secondary to post secondary education. Students with Accuplacer Arithmetic and/or Algebra placement test scores below 65 and SAT scores below 490 are encouraged to enroll. *Elective courses do not satisfy mathematics credit requirements.* **COURSE #1330** 

#### COMPUTER SCIENCE

Prerequisite: Algebra I

1 Credit, but may be taken for ½ credit per semester

Designed to help students experience sound techniques of problem-solving through the use of the computer, this course is an introduction to programming in Java. Computer Science is a heavily lab- oriented, hands-on class where students are encouraged to develop their own problem-solving strategies. Students will solve problems involving business, science, mathematics, manufacturing, and construction. The course stresses the construction of software that is both user-friendly as well-documented.

Elective courses do not satisfy mathematics credit requirements. COURSE #1374

#### COMPUTER SCIENCE ADVANCED

Prerequisite: Algebra I

1 Credit, but may be taken for ½ credit per semester

Students will learn how to write logically structured, well-documented computer programs using the Java Programming Language. They may take the Advanced Placement Computer Science Examination to possibly earn college course credits. *Elective courses do not satisfy mathematics credit requirements.* **COURSE #1375** 

#### **STATISTICS**

Prerequisite: Pre-Calculus

1 Credit

This course is intended for students who plan to enroll in majors that use statistics, such as psychology, business, health science, sociology, history, education, science, pre-law, and engineering. The students will analyze actual data using the TI83 graphing calculator. The concepts studied include: exploring data distributions, correlation, linear regression, sampling methods and designing experiments, normal distributions, confidence intervals, statistical significance, and tests of significance. Students may take this class concurrently with Pre-Calculus with math teacher recommendation.

Elective courses do not satisfy mathematics credit requirements. COURSE #1372

#### AP STATISTICS

Prerequisite: Pre-Calculus

1 Credit

This course is intended for students who wish to move beyond the topics covered in Statistics, described above. A supplementary text is assigned, as the course features more rigorous problems and additional topics. Students may take this class concurrently with Pre-Calculus with math teacher recommendation. Students are prepared for the AP Statistics Examination, which may enable them to earn college credit. *Elective courses do not satisfy mathematics credit requirements.* This course requires summer work. **COURSE #1373** 

# **MUSIC**

#### **Academic Planning Notes:**

- All music courses address the Fine Arts credit requirement.
- All music courses, except Jazz Band, carry 1 Credit
- Advanced credit for the music department's band and chorus courses is available providing the student meets certain requirements. Interested students should see the department head for details.

### **CONCERT BAND**

Prerequisite: demonstrated proficiency

Recommended level: 9-10

In this course, students perform standard concert band literature ranging in difficulty from grade III to grade VI. The first quarter of the year, the band marches in parades and parade competitions. The last three quarters of the year are spent on concert band literature with performances at school concerts and music festivals. In order to be in the band, a student must demonstrate a proficiency level that shows the student can be a contributing band member. **COURSE #2270** 

#### JAZZ BAND

Prerequisite: Must be a member of Concert Band or Wind Ensemble and be selected by the instructor

1/2 Credit

Recommended level 9-12

This course is an opportunity for instrumental musicians` to explore and perform traditional big band jazz, grades III to V. There will be opportunities for students to learn to the art of jazz improvisation. The group rehearses once a week on Monday evenings from 6:00 to 8:00. Jazz Band performs at school concerts and assemblies, and also at other functions and festivals throughout the year. This is a half credit course. Attendance at rehearsals and performances is mandatory.

**COURSE #2250** 

#### WIND ENSEMBLE

Prerequisite: audition

Recommended level: 11-12

This course provides an opportunity for instrumental musicians to explore more difficult band literature for smaller groups, grade level III-VI. The ensemble has an extensive performance schedule throughout the year. At times, the Wind Ensemble will be combine with the Concert Band for performances, which include some parades (Memorial Day) and parade competitions (such as the Maine State Parade and the Maine Firefighters Convention Parade). The rest of the year is spent on advanced band literature with performances at school concerts and music festivals, both in state and regionally. Wind Ensemble is part of a sequence that begins in elementary school and continues through middle school and high school.

**COURSE #2271** 

### CHAMBER SINGERS

Prerequisite: audition

Recommended level: 11-12

This course is offered to instruct singers, both male and female, who wish to explore more difficult choral literature for smaller groups, grade levels IV-VI. Music literacy instruction is offered to all members of the group. The ensemble has an extensive performance schedule at school concerts and festivals, both in state and regionally. **COURSE #2276** 

#### **CONCERT CHOIR**

Prerequisite: demonstrated proficiency

Recommended level: 9-12

In this course, students perform standard choral literature, ranging in difficulty from grade III to grade V. Proper vocal technique and ensemble singing are stressed. The Concert Choir performs at school concerts and festivals. Students need not audition to enter this group but must maintain a level of proficiency that enables the student to be a contributing member of the ensemble. **COURSE #2272** 

### TREBLE CHOIR

Prerequisite: audition

Recommended level: 10-12

This course is offered to female singers who wish to explore treble (upper) voice choral literature, grade levels IV - VI. Music literacy instruction is offered to all members of the group. The ensemble has an extensive performance schedule at school concerts and festivals, both in state and regionally. **COURSE #2278** 

#### WOMEN'S CHOIR

Prerequisite: demonstrated proficiency

Recommended level: 9-12

Similar to **CONCERT CHOIR** (see preceding description), this course is for female students only. Proper vocal technique and ensemble singing are stressed. The Women's Choir performs at school concerts and festivals. Students need not audition to enter this group but must maintain a level of proficiency that enables the student to be a contributing member of the ensemble. **COURSE #2279** 

#### INTRODUCTION TO MUSIC WRITING

Recommended level: 11-12

This course deals with the structure of music, including scales, chords, melodic notation, and harmonization. Students learn to use computers, MIDI keyboards, and pianos to create then perform their own compositions. Students also learn to listen critically to music of different styles. Music listening will be geared toward developing a critical understanding of why music sounds as it does. Compositional and historical styles, techniques, and instrumentation will be explored. **COURSE #2290** 

#### ADVANCED MUSIC THEORY

Prerequisite: Introduction to Music Writing or permission of the instructor

Recommended level: 12

Advanced Music Theory develops an in depth understanding of the fundamentals of music (notation, tonality, interval and chord identification) and explores melody, harmony, and rhythm as related to a variety of musical styles including popular, jazz, classical, and commercial music. The course uses an integrated approach to the development of written, aural, compositional and analytical skills including those necessary for digital composition and recording. The material and skills presented in this class are typical of a first year college music theory class. The student may choose to prepare for and take the AP Music Theory Examination at the end of the year. Advanced Music Theory presumes a working knowledge of music fundamentals: staff notation, scales, intervals, chords, keys, melody, and simple harmony. **COURSE #2292** 

### **AUDITIONS CLASS**

This course does NOT count towards the Fine Arts requirement.

½ Credit ((Fall semester only)
Recommended level: 9 − 12

Are you a singer or instrumentalist getting ready for the District III or All-State audition? A senior prepping for College auditions or an actor who wants to improve your audition skills? If so then this class is for you! In this course we will focus on the art of the audition. As musicians and actors this is our version of a job interview and there are many tricks of the trade. Students will work individually to improve their auditioning skills in their focus area as well as participate in class activities. **COURSE #2293S** 

# THE BROADWAY MUSICAL!

1/2 Credit ((Spring semester only)

Recommended level: 9 – 12

What do Bono, Billy Joel and Green Day have in common with Stephen Sondhiem, Alan Menken and Andrew Lloyd Webber? They've all written award winning Broadway musicals! Come explore the world of the Great White Way as we trace the roots and evolution of the musicals of today and beyond. This is a non performance based class. **COURSE #2294S** 

# PHYSICAL EDUCATION

#### **Academic Planning Notes:**

- Physical Education credit required: 1
- Required courses: PE I and PE II or OUTDOOR EDUCATION
- INTRODUCTION TO SPORTS OFFICIATING does not satisfy the state physical education credit requirement

#### PHYSICAL EDUCATION I

½ credit

Recommended level: 9

This course introduces students to the foundations of physical conditioning and personal wellness and teaches them how to assess their strength, flexibility, muscular endurance, and cardiovascular fitness. Students must complete specific common assessments that demonstrate achievement of the Maine Learning Results in physical education. Students also participate in various types of fitness and individual lifetime activities. **COURSE#3279S** 

#### **OUTDOOR EDUCATION**

Prerequisite: Physical Education I

NOTE: Students may take and complete this course instead of PE II in order to earn required credit.

1/2 Credit

Recommended level: 10-12

This course provides students with a way to fulfill Maine's PE requirement in lieu of PE II. In an outdoor setting, course work introduces students to lifelong activities and living skills. Students will participate in team building activities, learn basic wilderness first aid, demonstrate the ability to navigate with a map and compass, and learn how to survive in various outdoor settings by using basic camping skills such as fire building, cooking, and shelter construction.

**COURSE#3292S** 

#### PHYSICAL EDUCATION II

Prerequisite: Physical Education I

1/2 Credit

Recommended level: 10-12

Students are introduced to and select from a variety of recreational and lifetime activities to fulfill the PE requirement. In this course, students have the opportunity to explore and participate in activities that are designed to enhance personal fitness and cognitive, social, and psychomotor skills. Students in this course must also complete specific common assessments that demonstrate their achievement of the Maine Learning Results in physical education. **COURSE#3289S** 

### PHYSICAL EDUCATION ELECTIVES

NOTE: this course does NOT address Maine's PE credit requirement.

#### INTRODUCTION TO SPORTS OFFICIATING

Prerequisite: PE I and PE II

1/2 Credit;

Recommended level: 11-12

This course is designed to introduce students to sports officiating. They will develop an officiating philosophy, a code of ethics, and learn how to provide athletes, coaches, and spectators an opportunity for safe and equitable standards for competition. Students will participate in classroom discussion, field work, and take an officiating exam in a sport of their choice. **COURSE#3395S** 

# **SCIENCE**

## **Academic Planning Notes:**

In selecting science classes, students and parents are asked to be mindful of the following:

- \* Students need three (3) credits of science to graduate
- \* Specific courses recommended for post-secondary education: Physical Science, Biology, Chemistry and Physics
- \*Typical sequence for science courses are: Physical Science (9th grade), Biology (10th grade), Chemistry (11th Grade) and Physics (12th Grade).
- \* All of the core courses, Physical Science, Biology, Chemistry and Physics, are lab based science courses. Many competitive institutions suggest the inclusion of another advanced level laboratory science course upon completion of Biology, Chemistry, and Physics.
- \* Courses marked with an asterisk (\*) include 50% more instructional time.
- \* Students who wish to enroll in Advanced Placement or "honors" level science courses must complete announced screening requirements in the spring prior to enrollment. Check with the science department head for additional information, including specific screening dates and deadlines.
- \* Three and four year Vocational students have modified graduation requirements. They should check with their guidance counselor and/or the science department chair on what courses are required.

#### **Guidelines for Credit Recovery:**

- \* Students who do not pass Science I must take Physical Science Credit Recovery. They may take this at the same time as Biology.
- \* Similarly, students who do not pass Biology should take Biology Credit Recovery. They may take this while taking Chemistry.
- \* Students who do not pass Chemistry should enroll in Chemistry/Physics to earn their third science credit.

# SCIENCE I

Recommended Level: Grade 9

Students take one of the following courses:

## PHYSICAL SCIENCE LITERACY

1 Credit

In this course you will: discover the nature of scientific research; learn the nature of science, technology and mathematics; develop the ability to evaluate scientific data; practice scientific communication, scientific reasoning and critical thinking; participate in the team learning and discovery process; and strengthen your knowledge of science. Major areas of study include basic chemistry, light and sound, forces and motion and the universe. This course focuses on improvement in literacy. **COURSE #1420** 

#### ACADEMIC PHYSICAL SCIENCE I

1 Credit

Academic Physical Science I provides students with an opportunity for a lab science class in their first year of high school. The focus will be on making observations and gathering evidence in order to develop a deep understanding of the science content as well as of the nature of science and the skills of scientific reasoning. Major areas of study include basic chemistry, light and sound, forces and motion, and the universe. Independent research projects with oral presentations, readings, homework, and library and Internet research are required. **COURSE #1423** 

### PHYSICAL SCIENCE CR

1 Credit (Semester Course)

This course is specifically designed for students that need to earn their physical science credit after not successfully meeting the standards the first year. Students will review the physical science learning results and work towards meeting the standards. Students are placed into this course based on their prior performance in physical science I. This course may be paired with Biology with department head approval. **COURSE #1421** 

### **SCIENCE II**

#### Prerequisite Science I

Recommended Level- Grade 10 Students take one of the following courses:

#### **BIOLOGY**

1 Credit

Students are introduced to a variety of topics in the field of biology. Topics include: ecology, cells, heredity and reproduction, and evolution. In-class lab exercises are assigned along with other in-class work. Projects involving library and independent research and oral presentations are also required. **COURSE #1443** 

### ACADEMIC BIOLOGY

1 Credit

This course involves the more in-depth scientific study of life. It is faster paced for students who have demonstrated higher levels of science achievement. Topics include: ecology, cells, heredity and reproduction, and evolution. Frequent lab exercises, independent projects with oral presentations, readings, homework, and library and Internet research are required. **COURSE #1444** 

#### **HONORS BIOLOGY\***

11/2 Credits

Honors Biology is intended to challenge and prepare students for more rigorous science courses. Students will practice and apply critical thinking, data analysis, and essay and laboratory writing skills. Students are expected to conduct a research project, complete extra readings, and keep an ecology journal. Topics include: ecosystem, cells, heredity and reproduction, evolution and biodiversity. Students must complete required summer work. **COURSE#1450 AND COURSE#1451S LAB** 

#### **BIOLOGY CR**

1 Credit (Semester Course)

This course is specifically designed for students that need to earn their biology science credit after not successfully meeting the standards the first year. Students will review the biology science standards and work towards meeting the standards. Students are placed into this course based on their prior performance in biology. This course may be paired with Chemistry with department head approval. **COURSE #1442** 

### SCIENCE III

#### Prerequisite Science I and II

Recommended Level- Grade 11 Students take one of the following courses:

## **CHEMISTRY**

#### Prerequisite Science II and Algebra I

1 Credit

This fundamental course in chemistry introduces students to its basic principles. The presentation of materials is primarily descriptive. There is an emphasis on the responsibility of the student in the learning process. Areas of study include scientific measurement, atomic structure, chemical formulas and equations, matter and energy, behavior of gases, the periodic table, and chemical bonding. **COURSE #1448** 

#### ACADEMIC CHEMISTRY

Prerequisites: Algebra II (or concurrent enrollment)

1 Credit

This is a challenging course in the general concepts of chemistry. It is structured similarly to a college course, with a major emphasis on the application of math skills and on the responsibility of the student in the learning process. Areas of study include scientific measurement and calculations, atomic structure, chemical formulas and equations, energy changes, behavior of gases, the periodic table, and chemical bonding. Students must provide their own scientific calculators.

**COURSE #1454** 

### **HONORS CHEMISTRY\***

Prerequisites: Algebra II; department screening including successful completion of summer work

11/2 Credits

This exceptionally challenging course is for students who have previously shown a strong aptitude for science. This course moves through complex material at a rapid pace. Topics include scientific measurement, atomic and molecular structure, chemical formulas and equations, stoichiometry, oxidation-reduction reactions, electrochemistry, kinetic theory, and acid-base theory. Summer work is required. Students are expected to provide their own scientific calculators.

#### COURSE #1457 AND COURSE #1456S LAB

### **CHEMISTRY/PHYSICS**

1 Credit

Recommended level: Grade 11-12

This full year course introduces students to fundamental concepts in chemistry and physics. Topics covered include scientific measurement, force and motion, nuclear physics, behavior of gases, atomic structure, matter and energy, chemical bonding, and chemical formulas and equations. **COURSE #1458** 

### **SCIENCE IV**

Prerequisite Science I, II and III

Recommended Level- Grade 12 Students take one of the following courses

### **PHYSICS**

Prerequisite: Algebra I

1 Credit

This course is designed for students who plan to further their education beyond high school, but who have had difficulty mastering complex algebraic and trigonometric concepts. Several course objectives are designed to help students improve their problem solving and mathematical skills. Topics include: kinematics, Newton's laws, motion in two dimensions, impulse momentum, nuclear physics, and energy with emphasis on consideration of alternative energy sources. Activities help students develop physics concepts that apply to every day experiences. Students are expected to provide their own scientific calculators, keep a physics notebook, and complete daily assignments. **COURSE #1462** 

#### **ACADEMIC PHYSICS**

Prerequisite: Algebra II

1 Credit

This rigorous course addresses the following topics: kinematics, Newton's laws, motion in two dimensions, impulse momentum, nuclear physics, and energy with emphasis on consideration of alternative energy sources. There is a major emphasis on the application of mathematics and communications skills and on the responsibility of the student in the learning process. Adequate math and writing skill proficiencies are essential for learning in this course. Students are expected to provide their own scientific calculator, keep a physics notebook, and complete daily assignments. **COURSE #1464** 

#### **HONORS PHYSICS\***

Prerequisites: Advanced Algebra II; department screening, including successful completion of summer work 1½ Credits

This level of physics is more demanding than Academic Physics. Topics include: kinematics, Newton's laws, motion in two dimensions, impulse momentum, fluid mechanics, modern physics and energy with an emphasis toward alternative energy sources. Well-developed math and writing skills are essential for learning in this course. Though this course is not designed to prepare students for AP Physics BC examination, materials are available for home study. Students are expected to provide their own scientific calculator, keep a physics notebook, and complete daily assignments. **COURSE #1469 AND COURSE #1470S LAB** 

### SCIENCE ELECTIVES

NOTE: these courses do NOT fulfill scope and sequence requirements associated with Science I-III coursework.

### **ASTRONOMY**

Prerequisite: Physical Science and Algebra I

1/2 Credit; Recommended level: 11-12 (10th with department head approval)

Astronomy surveys the universe, from solar system bodies to galaxies. Students consider theories about the scale, content and motion of objects in space from both historical perspectives and through the use of current technologies. Techniques include: field observation, scientific research and planetarium production. The course prepares students for careers in science research or astronomy and invites lifetime astronomical involvement. Students work in teams and individually with telescopes and imaging systems and also conduct authentic research including a planetarium show. **COURSE #1485S** 

#### **AP BIOLOGY \***

Prerequisite: Science I – III, department screening including successful completion of summer work.

11/2 Credits

Recommended level: 12

This college-level introductory biology course is for students who want to pursue a college major in any branch of the sciences. Students must master a broad variety of biological principles and processes including: ecology, biochemistry, cytology, heredity and molecular genetics, plant physiology, evolution, and human physiology. This course entails extensive readings and a demanding laboratory program. Students are expected to take the AP exam in May.

COURSE #1447 AND COURSE #1446S LAB

# CATHANCE RIVER PRESERVE: FIELD STUDIES AND ASPIRATIONS

Pre-requisite: Science I, Science II

½ Credit (2<sup>nd</sup> semester only)

Recommended Level: 11-12 (preference to grade 12)

Using the nearby Cathance River Preserve and Ecology Center as a focus, students engage in community-based service learning. Possible projects include scientific research, displays and videos. Guest speakers help support career exploration in environmental fields and local environmental projects. During spring, students prepare and teach environmental lessons to elementary students. This class becomes the students' Advisory. **COURSE #1425S** 

#### AP ENVIRONMENTAL SCIENCE \*

Prerequisite: Completion of Academic or Honors Biology; department screening including successful completion of summer work

11/2 Credits

Recommended level: 11-12

This introductory college level course concerns the science of environmental problems, processes, and solutions. Students explore the interrelationships of the natural world and the impacts of humans. Students are exposed to several field techniques used to gather environmental data. Specific topics include land, air, and water pollution, biodiversity, global climate change, energy, public health, urban planning, and sustainability. Each student takes the AP Exam in May and completes a final alternate assessment presentation at the end of the course. Summer work is required.

COURSE #1482 AND COURSE #1483S LAB

#### FORENSIC SCIENCE

Prerequisite: Science I, Science II

1/2 Credit;

Recommended level: 10-12

This course focuses on practices associated with the analysis of physical evidence found at crime scenes. The fundamental objective is to teach the basic processes and principles of scientific thinking and apply them to solve problems that are not only science related, but also cross the curriculum with critical thinking skills. Topics include: Observation skills, Types of evidence, Impression evidence, Forensic Law, Fingerprints, Hair, Fibers, Toxicology, Soil and Glass Analysis, Blood, DNA, and Entomology. Frequent readings of case studies, discussions, homework, lab exercises and independent projects are required. **COURSE #1497S** 

### **HUMAN ANATOMY AND PHYSIOLOGY**

Prerequisites: Completion of Honors or Academic Biology and completion or concurrent enrollment in Honors or Academic Chemistry

1 Credit;

Recommended level: 11-12

This course provides mature students with an opportunity to explore and apply knowledge of the human body. The major organ systems of the body will be studied including skin and body membranes, skeletal system, muscular system, nervous system, senses, endocrine system, blood, cardiovascular system, lymphatic system and body defenses, respiratory system, digestive system and metabolism, urinary system and reproductive system. Frequency readings, discussions, homework, lab exercises and independent projects are required. **COURSE #1496** 

#### INFECTIOUS DISEASE

Prerequisite: Science I

1/2 Credit

Recommended level: 10-12

This course focuses on the biology of bacteria, viruses and prions and the response of human immune system. Topics of epidemiology and public health are introduced. The historical relevance of epidemics is also presented. This course will require various readings, research projects, and lab work. Students who want to learn about infectious disease globally including past and present issues, and may be thinking about a career in the health field or just have a curiosity about public health are encouraged to take this course. **COURSE #1492S** 

#### INTRODUCTION TO WEATHER AND CLIMATE

Prerequisite: NONE

1/2 Credit:

Recommended level: 9-12, preference to Grades 9 and 10

This course focuses on the basic concepts involved in understanding weather and climate. Major topics include: atmospheric composition and stability; energy, heat transfer, wind patterns moisture and precipitation; weather pattern (air masses, fronts, storms); weather prediction and forecasting; climates, climate regions, and long-term climate changes. Lab activities, research, and class projects will be included in this course. **COURSE #1499S** 

#### MARINE SCIENCE

Prerequisite: Science I

1/2 Credit;

Recommended level: 10-12

Students explore the relationships between the physical, geological, and chemical properties of the oceans and the ecological, environmental and evolutionary positions occupied by marine organisms. Students examine and at times use technologies for investigating oceans. Mankind's actions and their impact on the quality of our oceans are examined with an emphasis on the New England area. This is a laboratory-based course featuring individual research projects, fieldwork, and library and Internet research. **COURSE #1495S** 

### **ROBOTICS**

Prerequisite: Science I

1/2 Credit;

Recommended level: 10-12

Robotics is the science and technology of the design, manufacture and application of robots in various applications, including space exploration, surgery and everyday living. In this course, students take on the roles of mechanical engineers, computer scientists and electrical engineers. Students research dynamics, kinematics and sensors. Subjects such as motion planning and obstacle avoidance, and velocity and acceleration are covered. Students put the knowledge into practice through lab settings where robots are created with teams. Students will have the opportunity to use VEXX robotics and/or Lego Mindstorm. **COURSE #1490S** 

# **SOCIAL STUDIES**

#### **Academic Planning Notes:**

- Social Studies credits required: 3 (Social Studies I-III). All students must complete required common assessments embedded in Social Studies I-III courses.
- Many students enroll in one or more additional social studies courses during their final two years of high school or earlier with department head approval.
- Some sections of Social Studies I and Academic English I are linked through an integrated, interdisciplinary curriculum.

# **SOCIAL STUDIES I**

9th grade students take the two semester courses that follow:

### ACADEMIC INTRODUCTION TO WORLD RELIGIONS

1/2 credit (fall semester)

Why is there religion? What its purpose? This course will explore the origins, history and practices of different religious traditions. **COURSE #1535S** 

#### ACADEMIC COMPARATIVE GOVERNMENTS

½ credit (spring semester)

This course examines the purpose of government and compares the basic philosophies for differing systems of government. It will also explore the rights and responsibilities of citizenship. Special emphasis will be placed on the government and historical influences of the American system of government. **COURSE #1536S** 

# **SOCIAL STUDIES II**

Prerequisite: Social Studies I

10th grade students take the two semester courses that follow or screen for AP European History

## **ACADEMIC COMPARATIVE ECONOMICS**

½ credit (fall semester)

This course will start with an examination of the basic origin and structures of various economic models. 'What defines wealth?' and 'How do people manage their wealth?' are some of the questions that will be addressed in the first part of the course. The second half of the course will have a more in-depth study of the American school of economics and its blending of the traditional economic systems. **COURSE #1546S** 

### ACADEMIC AMERICAN FOREIGN POLICY

½ credit (spring semester)

In this course, students will be asked to develop their views on how both the United States and the individual student should interact with the rest of the world. This will be accomplished by having students analyze case studies within broader themes such as the environment, terrorism, foreign aid, genocide, conflict resolution, immigration and international rivalries and competition. **COURSE #1547S** 

### **AP EUROPEAN HISTORY**

Prerequisite: department screening, including completed summer work

1 Credit

Recommended level: 10

This course, for the student who wants to prepare for the Advanced Placement European History Examination, deepens the student's knowledge and understanding of European history. The course offers an in-depth look at selected areas of the history of Europe and related topics. College level materials are used in class. Strong emphasis is placed upon analytical writing, examination of historical schools of thought, and the ability to express points of view in both written and verbal modes. **COURSE # 1548** 

# **SOCIAL STUDIES III**

Prerequisite: Social Studies II

In order to fulfill Maine's US History requirement, 11th grade students take two of the semester courses that follow or may screen for AP United States History. Social Studies III semester courses can also be taken as semester electives.

# **ACADEMIC US HISTORY**

#### **AMERICA AT WAR**

1/2 Credit

This course considers the impact of both World War I and World War II on the development of the United States. A great deal of emphasis will be placed on the question of why the United States changed its foreign policy from one of isolationism to one of intervention. Other topics will include how the wars affected race relations and women's roles in the United States, how technology affected the wars and how the wars made the United States a super power. **COURSE #1553S** 

#### **COLONIAL AMERICA**

1/2 Credit

This course will be a close examination of the important events and people that lead to the creation of this nation. From European discovery and colonization of North America to the writing of the Constitution, this important era saw the beginnings of some of America's most cherished values. This course will cover a variety of topics from early American history to include the role and impact of Native Americans as well as the writing of the US Constitution. **COURSE #1550S** 

### **POST-WORLD WAR II AMERICA**

1/2 Credit

This course will examine the tumultuous years of the second half of the twentieth century. How did the United States become a world superpower despite the internal challenges of the civil rights movement, the student protests of the 1960s, Watergate and the external challenges of the Cold War, the Space Race and the rise of terrorism? **COURSE #1554S** 

#### RE-INVENTING AMERICA: RECONSTRUCTION AND REFORM

1/2 Credit

The years between the end of the American Civil War and the beginning of the 20<sup>th</sup> century saw the explosive growth of the United States. From a quiet, primarily rural society, the US grew into the world's industrial leader. These remarkable changes brought fabulous wealth and power for some and pain for others. The period ends with a time of genuine reform and a new place in the world for the US. Find out about the winners, the losers, and the reformers of 19<sup>th</sup> century America. Learn why and how the 20<sup>th</sup> century became "America's century". **COURSE #1552S** 

#### THE CIVIL WAR

1/2 Credit

This course consists of an extensive study of the American Civil War from 1858-1865. Students will examine causes of the Civil War and the results and impacts of this conflict. The class will focus on military and political leaders, but will also emphasize the role of the individual soldier. **COURSE #1570S** 

# **ACADEMIC AMERICAN STUDIES**

#### **FREEDOM**

1/2 Credit

This is an American history course centered on the topic of freedom. How is it denied? How is it obtained? How can it be preserved? Who possesses it? Students will analyze the concept of freedom in case studies from American history such as the civil rights movement, the American Revolution, the Emancipation Proclamation, the women's suffrage movement and even the Salem witch trials in order to answer these questions. **COURSE #1555S** 

#### **HERO**

1/2 Credit

How important is the individual in history? When do people rise up, take a stand and try to make changes? This history class will explore the concept of heroism. Students will define the characteristics of heroes and heroic acts and evaluate who really is a hero and why society seems to need heroes. After this work is completed, students will learn about and discuss people involved in important events and periods in American history such as the American Revolution and Civil War.

#### **COURSE #1557S**

#### REVOLUTIONS

1/2 Credit

This course seeks to answer four broad philosophical questions: 1. Why do people revolt? 2. How do revolutionaries get out their 'message'? 3. What actions can revolutionaries take during a revolution? 4. Why do revolutions ultimately succeed or fail? Each unit will follow the same basic pattern starting with introductory activities that seek to clarify the essence of the broad questions listed above. The course will then examine various historical revolutions (with special emphasis on the American Revolution) to see how actual revolutionaries acted in the past. Each unit will end with the students taking the lessons learned from the unit to plan a successful political movement at MTA. **COURSE #1556S** 

### **AP UNITED STATES HISTORY**

1 Credit

Prerequisite: department screening, including summer work

This course, designed for the student who wishes to prepare for the Advanced Placement US History Examination, provides an in-depth examination of US history. College level materials are utilized and a heavy emphasis is placed upon analytical writing, examination of historical schools of thought and the ability to express points of view in a seminar format. There is summer reading for this course. **COURSE #1559** 

# SOCIAL STUDIES ELECTIVES

NOTE: these courses do NOT fulfill scope and sequence requirements associated with Social Studies I-III coursework.

### ART & SOCIETY, PART 1 and PART 2

½ Credit (up to 1 Credit for year) Recommended level: 11-12

These two semester-length courses examine the creative impulse throughout Western history. Semester 1 features art, architecture and culture from the prehistoric to medieval eras, while semester 2 focuses on the modern period (the Renaissance to the present). Students uncover the artistic and intellectual advances in history and their connection to society through classroom discussions, analysis of written and visual works as well as studio art experiences involving various media. The courses will be taught by a pair of teachers from both the Visual Arts and Social Studies departments.

NOTE: This does not fulfill the Social Studies I, II or III requirements.

PART 1 COURSE # 1562S (semester 1)
PART 2 COURSE #1563S (semester 2)

#### **CURRENT EVENTS**

1/2 Credit

Recommended level: 11-12

Do you want to be more informed about current events and issues affecting you, the state, the nation and the world? Do you want to develop important social studies skills such as research, writing and speaking? If yes, then this is the course for you. The course begins with a study of the First Amendment, the media, the media bias, which establishes a foundation for the study of current events. Every class meeting begins with a review of the top news stories of the day and throughout the semester; students examine current issues through documentaries and research.

NOTE: This does not fulfill the Social Studies I, II or III requirements. COURSE #1585S

#### **PSYCHOLOGY**

1/2 Credit

Recommended level: 11-12

This course gives the student a basic understanding of individual human behavior. The course covers topics such as motivation, perception, communication, learning, thinking, personality, and abnormal behavior. Students develop an understanding of these topics through experiments and consideration of human experience.

NOTE: This does not fulfill the Social Studies I, II or III requirements. COURSE# 1561S

# **SOCIOLOGY**

1/2 Credit

Recommended level: 11-12

The study of sociology involves learning about relationships within groups and in social institutions. The course provides students with a basic and practical knowledge of the working relationships within cultures, families, groups, institutions, and belief systems. Principles are applied to social problems and issues, addressing topics such as the family, religion, poverty, population, values, and education. NOTE: This does not fulfill the Social Studies I, II or III requirements. COURSE #1560S

#### AP U. S. GOVERNMENT & POLITICS

Prerequisite: Social Studies III

1 Credit

Recommended level: 12

This Advanced Placement course provides students with a critical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also occasions familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. Students prepare for the AP United States Government and Politics Examination.

NOTE: This does not fulfill the Social Studies I, II or III requirements. COURSE #1564

# **VISUAL ARTS**

#### **Academic Planning Notes:**

- The department recommends that at least ½ credit in the Visual Arts be completed prior to grade 11.
- Foundations in Visual Arts is a prerequisite for all visual arts courses taken prior to grade 11.
- Students planning to take visual arts courses to fulfill the Fine Arts requirement are encouraged to take Foundations in Visual Arts first.
- Many students exceed the minimum Fine Arts credit requirement by taking several visual arts courses.

### **CERAMICS & POTTERY**

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1 Credit

Designed for the student who chooses to work intensely with clay, the course teaches the skills and processes involved in pottery. Various hand building techniques, work on the potter's wheel and the production of functional and non-functional as well as sculptural clay objects are taught. Through this course, a student is able to focus on technical, historical, aesthetic, cultural and contemporary concerns of clay workers as they develop their own personal and artistic ways of working.

**COURSE #2186** 

#### DIGITAL MULTIMEDIA ART

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1/2 Credit

We encounter computer generated imagery everyday, but is it art? Students will develop their own answer to this question by exploring the influences that computers and other multimedia tools have had on art. By learning concepts and techniques related to computer manipulated imagery, students will discover new ways to problem solve visually. Students will gain practical knowledge related to computer design as well as conceptual methods of expressing themselves. Communicating through digital media tools will expand student knowledge of the elements and principles of design and help them understand how the digital age has impacted cultures in the 20th-21st century. **COURSE #2110S** 

# **DRAWING**

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1/2 Credit

Drawing is an art form and means of personal expression. Its practice increases visual literacy: understanding what and how we see. Design elements of drawing are studied including historical study of visual communication. Visual observation, basic media skills, and creative uses of drawing are stressed. Various drawing media such as pencil, ink, charcoal, mixed media and the computer are explored as drawing tools. **COURSE #2172S** 

### **FOUNDATIONS IN VISUAL ARTS**

1/2 Credit

Recommended level: 9-10

This course is available to students who wish to partially fulfill the fine arts requirement, as well as students who are considering taking other arts courses later during high school. Students develop a visual and aesthetic "foundation" on which to build by increasing their exposure to the visual world, enlarging their visual vocabulary and experience, improving their skills in visual expression, and making them more aware of their visual surroundings. Students will use design elements and principles in a variety of media such as paint, printmaking, drawing, and 3-dimensional forms. **COURSE #2179S** 

#### **PAINTING**

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1/2 Credit

Students experience various painting media and techniques. Students come to understand the expressive qualities of oil, acrylic, watercolor, and tempera through their work. In addition, the historical significance of artists as reflectors of their time is studied providing a context for understanding of visual art. In applications including sketchbook assignments, written responses and studio work, students will demonstrate understanding of painting's visual language. **COURSE #2183S** 

#### **PHOTOGRAPHY**

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1 Credit

A visual language, photography is part of contemporary communication and culture. Black and white photography, both analog and digital, is the medium used to learn the language. Students encounter the elements and principles of design, the history and appreciation of photography, the use of 35mm analog cameras, developing film, and darkroom techniques as well as non-silver processes. The digital component of the course will involve the digital camera, scanning negatives and positives, and preparing images on the computer to make black and white inkjet and laser prints. Emphasis is placed on seeing, analyzing, and creating through structured photographic assignments, written analyses of master photographers, journals, readings, and group discussions. Students may supply some of the materials used. **COURSE #2170** 

#### PRINTMAKING

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1/2 Credit

Students will experiment with and explore the relief and intaglio techniques of fine art printmaking. Methods used will include linoleum blocks, collograph, monoprinting, dry-point etching, and silkscreening. The focus will be on creating multiple images of consistent quality. The history of printmaking and several important male and female artists in the field will be studied. Studio activity will comprise 80% of the course; art history, student reflection, discussion, and criticism will comprise the remaining 20%. **COURSE #2181S** 

### **SCULPTURE**

Prerequisite: Foundations in Visual Arts in grades 9 or 10

1/2 Credit

Students interested in working with the materials and concepts involved in making sculpture will explore three dimensional design. The dynamics of the spatial aspects of an object and how an idea develops into an art form are investigated. Students carve, cast, and assemble in three dimensions with clay, metal, plastic, wood, plaster, found objects and more.

**COURSE #2197S** 

# ADVANCED PLACEMENT STUDIO ART OFFERINGS

Recommended level: 11-12

The AP Studio Art curriculum offers opportunities for students who wish to submit an AP Studio Art exam portfolio in a particular media. Mt. Ararat's program includes three course offerings: an AP Studio Art Drawing course with emphasis on painting, drawing, and design; an AP 3-D course with ceramics emphasis; and an AP 2-D course with an emphasis on photography. This means that it will be possible for students who are seriously interested in a particular area to submit a portfolio in that media.

Students in AP Studio Art courses will create a body of quality work that will demonstrate breadth of experience and technique and represent a concentration on a topic or theme. Students will work in an intense studio environment with projects, homework, reading, and research assignments closely resembling a college level course. A significant amount of time beyond the class period will be needed to complete work for these courses.

#### AP STUDIO ART 3-D PORTFOLIO: CERAMICS

Prerequisite: department screening

1 Credit

This course prepares the student to submit a portfolio of three dimensional work. Because of the advanced level of the assigned work, previous classes in ceramics and/or sculpture are recommended. **COURSE #2166** 

### AP STUDIO ART PORTFOLIO: DRAWING

Prerequisite: department screening

1 Credit

This course prepares the student to submit a portfolio of two dimensional work in painting, drawing, design, and printmaking. It is recommended that students have previously taken Foundations, Studio Art, and other related art courses.

**COURSE #2165** 

#### AP STUDIO ART 2-D PORTFOLIO: PHOTOGRAPHY

Prerequisite: department screening

1 Credit

This course prepares the student to submit a portfolio of two dimensional photography work. While this course does not require a prior year of photography, it is expected that students will devote significantly more time to completing a greater number of assignments than they would in a non-AP photography course. **COURSE #2164** 

# **WORLD LANGUAGES**

#### **Academic Planning Notes:**

- While a World Language is not required for graduation, students interested in pursuing post-secondary education (particularly 2 or 4 year college programs) are urged to complete 3 years of a World Language.
- Placement in various course levels depends upon proficiency.

### **WORLD LANGUAGE I**

(Spanish, French, German, and Chinese)

#### 1 Credit

This course is for students beginning a language or continuing with their middle school introduction to that language. Students will aim to meet the novice-mid level of proficiency (ACTFL Guidelines) in the four linguistic skill areas (speaking, listening, reading and writing), as well as cultural understanding.

CHINESE – COURSE #1269 FRENCH – COURSE #1238 GERMAN – COURSE #1236 SPANISH – COURSE #1232

#### **WORLD LANGUAGE II**

(Spanish, French, German, and Chinese)

Prerequisite: World Language I

1 Credit

Students will be able to communicate in the present and past. They will be able to produce sentences and strings of sentences while comprehending more advanced structures. Students will strive to meet novice-high level of proficiency (ACTFL Guidelines).

CHINESE – COURSE #1270 FRENCH – COURSE #1248 GERMAN – COURSE #1246 SPANISH – COURSE #1242

### WORLD LANGUAGE III

(Spanish, French, German, and Chinese)

Prerequisite: World Language II or I Advanced

1 Credit

Students will be able to produce written and spoken language in the present, past, and future. They will communicate using strings of sentences and paragraphs aiming to reach the intermediate-low level of proficiency (ACTFL Guidelines). Their increase in vocabulary will aid in understanding more complicated texts and films.

CHINESE – COURSE #1271 FRENCH – COURSE #1258 GERMAN – COURSE #1256 SPANISH – COURSE #1252

# **WORLD LANGUAGE IV**

(Spanish, French, German and Chinese)

#### Prerequisite: World Language III

1 Credit

Students will be able to produce written and spoken language in the present, past, future. They will learn to express themselves in hypothetical situations as well as analyze, compare and contrast. Students will strive to communicate at the intermediate-mid level of proficiency (ACTFL Guidelines).

CHINESE – COURSE #1272 FRENCH – COURSE #1298 GERMAN – COURSE #1296 SPANISH – COURSE #1292

### **WORLD LANGUAGE V**

(Spanish, French, German and Chinese)

Prerequisite: World Language IV

1 Credit

Students will do an in-depth study of all previously learned tenses and strive to produce language at the intermediate-high level of proficiency (ACTFL Guidelines). Students will have the option of taking the Advanced Placement Exam in May.

CHINESE – COURSE #1273 FRENCH – COURSE #1268 GERMAN – COURSE #1266 SPANISH - COURSE #1262

# **WORLD LANGUAGE ELECTIVES**

#### EXPLORING FOREIGN CULTURES

½ credit (1 semester)

Students will learn about foreign cultures of their choice using technology and project based learning. Through directed research online, exploration with Google Earth and community resources, students will build and present an audio-visual presentation. **COURSE #1278S** 

### **FOREIGN FILM**

1/2 Credit (1 semester)

Students will explore cultural and historic eras and the state of the human condition through viewing a sampling of noteworthy foreign films. Using technology, discussion and the creation of a classroom time line, students will reflect and compare social and political scenes through time. **COURSE #1274S** 

### INTERNATIONAL DANCE

1/2 Credit (1 semester)

Students will explore world culture by using dance performance, technology, music, and community resources. This is a participatory class. Students are required to attempt the dances. **COURSE #1279S** 

# REGION TEN TECHNICAL HIGH SCHOOL

Region Ten Technical High School is located in Brunswick and serves the needs of Freeport, Brunswick, and Mt. Ararat students. Students are transported to Region Ten for half day morning or afternoon programs. Three elective credits are awarded for a full year's attendance at Region Ten. Region Ten has developed articulation agreements with some post-secondary schools which means that these colleges will award credit for work completed at Region Ten. Opportunities are available for students in Food Trades, Metal Fabrication and Welding, Automotive Technology, Auto Collision Repair, Commercial Art, and Early Childhood Development.

# **Academic Planning Notes:**

- A full year Region Ten course usually represents 3 credits / three Carnegie units. Check to be sure of your credit status.
- Certain Mt. Ararat credit requirements may be modified for Region Ten students. Please consult your guidance counselor for details.
- A course called **TECHNICAL ENGLISH** is available at Region Ten for students whose course load would otherwise prevent them from scheduling a vocational program.

#### **AUTO COLLISION REPAIR**

Students enrolled in this course will receive instruction on how to safely and productively perform all phases of collision repair and refinishing. This program is divided in four courses consisting of: painting and refinishing, non-structural analysis and damage repair, mechanical and electrical components. Automotive refinishing is a major component of this program. Color mixing, matching, tinting and blending techniques are explored emphasizing hands-on experience. Upon completion of this course, the student should be able to enter the work force at an entry level position or move on to a technical college to further advance their skills. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7040** 

### **AUTOMOTIVE TECHNOLOGY I**

#### NOTE: morning only

The Automotive Technology I program introduces students to the world of automotive maintenance and repair through a combination of classroom training and shop work on live vehicles. Students will gain the knowledge, skills and attitudes necessary to safely work in a shop setting using the tools and equipment to perform professional repairs on modern vehicles. Utilizing national, state, and local resources including standards set by NATEF (National Automotive Technicians Education Foundation) and the Maine Department of Education, students will have the opportunity to earn professional certifications from ASE (Automotive Service Excellence) and a Maine State Inspection License. In addition, articulation agreements with post-secondary programs have been established to award college credit for students wishing to further their education after high school. Units covered during this first-year program include comprehensive safety training, Brake Systems, Electrical and Electronic Systems, Engine Performance, and Steering and Suspension Systems. Professional development for students is enhanced through the Ford/AAA Student Auto Skills Challenge and Skills U.S.A. Class meets Monday-Friday for 2.5 hours in the AM session only. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7042** 

### AUTOMOTIVE TECHNOLOGY II

Prerequisite: Automotive Technology I

NOTE: afternoon only

The Automotive Technology II program is designed for students who have successfully completed the Automotive Technology I program. Auto Tech II continues to build a student's portfolio of skills and knowledge in the automotive field through work in the shop that strengthens and augments previously covered units of instruction. Newly covered units include Automatic Transmission and Transaxle, Manual Drive Train and Axles, Engine Repair, and Heating and Air Conditioning Systems. All students completing the course will leave with a professional resume and a letter of introduction to enable the student to seek immediate employment in the automotive field or to enhance the admission process into a post-secondary school. ASE certification and State Inspection licensing are encouraged. Professional development through the Ford/AAA Student Auto Skills Challenge and Skills U.S.A. continue to provide growth opportunity as well as potential scholarship sources. Class meets Monday- Friday for 2.5 hours in the PM session only. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7043** 

#### **BUILDING TRADES**

This course of study provides a combination of masonry and carpentry. Together, they offer a wide range of classroom and hands-on work experiences in the construction trades with a strong emphasis on safety. Carpentry areas of concentration include: rough and finish carpentry, floor, wall, and roof framing, exterior trim, insulation, drywall installation, construction planning and drafting. Masonry areas of concentration include: forms and foundation, brick and block work, stone, tile, masonry materials and mortars, scaffolding, chimneys, fireplace construction, arches and steps. Working offsite on community project functions is an important component of building trades. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels.

#### **COURSE #7046**

## COMMERCIAL ART

# This course fulfills the Fine Arts requirement.

The Commercial Art program was designed to introduce students to careers associated with digital design including but not limited to graphic design, illustration, animation and video game design. Students will be introduced to the basic principles and elements of design and gain software experience required to solve visual communication problems. Using industry standard Adobe software and related programs, students develop the ability and confidence to determine appropriate and successful designs to industry standards for a variety of applications. Upon completion of the course, students will have the opportunity to become Adobe Certified Associates upon successful completion of the Adobe exam. The main areas of focus:

• Solve graphic design problems with principles and elements of design;

• Learn industry standard Adobe software; Photoshop, Illustrator, InDesign and Flash;

• Prepare portfolio for professional presentation, evaluation, and college entry;

• Develop analytical thinking and problem solving skills for the digital design industry. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. This program has a dual enrollment with Central Maine community College in Adobe PhotoShop.

### **COURSE #7064**

### EARLY CHILDHOOD DEVELOPMENT

The Early Childhood Development Program prepares individuals to provide care and guidance of young children under the supervision of professional personnel. Students study the introductory ideas and concepts of Early Childhood Development from birth to grade 3 in an academic classroom. Students plan, organize and conduct activities for children to promote physical, interpersonal, motor, mental, and social growth and development of acceptable behavior: cleanliness, eating, playing, resting, and toilet habits. Supervised students operate a day care three days per week. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7039** 

### E.M.T. - BASIC

NOTE: morning only

The EMT Basic course of study includes trauma emergencies, pediatrics, special patient populations, and spinal assessment. Training includes clinical time in a hospital emergency facility and "ride along" training with a licensed Emergency Medical Service. Training will include vital signs, CPR/AED, oxygen administration, diabetic emergency treatment, spinal immobilization, and use of airway devices, along with other important life support training, including bleeding control. Students will learn the technical terms for life saving medicines and emergency application. Students must be prepared for a serious, rigorous course of study, and must possess a maturity commensurate with treating life-threatening incidents. Students may opt for the Firefighting curriculum or Health Occupations curriculum, to interface with EMT Basic. COURSE #7047

#### FIREFIGHTING I & II

NOTE: afternoon only

Firefighting I and II will provide students with the potential to become employable as firefighters at the age of 18, dependent of passing the State examination. The program will include training with local fire departments to gain essential understandings of combustibility and the use of fire apparatus designed to avoid loss of life and property. Important to the curriculum will be instruction in firefighting protocol and team building. Physical fitness will be stressed, along with the ability to communicate as a team member in a firefighting unit. Students will understand the history of firefighting and the evolution of building codes. Case studies will focus on the Great Maine Fire of 1947 and the fire/rescue operations during the tragedy of September 11, 2001. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **FIREFIGHTING I COURSE #7034**;

#### **FIREFIGHTING II COURSE #7035**

### **FOOD TRADES**

Food Trades prepares students for careers that support Maine's Hospitality Industry. Students learn concepts in food preparation and restaurant management. Emphasis is placed on maintaining a healthy environment through sanitation training and workplace wellness. Knowledge is applied through catering school and public functions. Participation in our public restaurant continues to develop competencies. Students earn Serve-Safe Certification upon successful completion of the National Restaurant Association Exam. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7048** 

#### GENERAL TRADES

Students interested in General Trades must be able to work at a community job experience independently, be self-motivated, understand the concept of work, and be able to follow directions. The General Trades Program is a one to four year technical training program designed to prepare students for employment or future placement in one of the regular Region Ten programs. Emphasis is placed on the development of attitudes, behaviors, and basic skills common to all trades. The Cooperative Learning approach is utilized in both the classroom and workshop areas. Students are encouraged to participate in FFA Organization (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7036** 

# HEALTH OCCUPATIONS - CERTIFIED NURSING ASSISTANT

NOTE: morning only

This course fulfills the Health requirement.

The Certified Nursing Assistant program is a one-year program for juniors or seniors. Students who successfully complete the program may sit for the Maine State Certification Examination. This certification allows students to work in a variety of health care settings offering comprehensive and compassionate daily care to elderly or ill patients. The Certified Nursing Assistant course requires a total of 170 hours in academic class time, skills lab, and clinical time a long term and acute care setting. The academic study includes anatomy and physiology, medical terminology, ethics, pathophysiology (disease process), infection control, patient care skills and portfolio development. Students enrolling in this program must be 16 years of age, be able to read and comprehend at a 10<sup>th</sup> grade level, have no record of criminal convictions or suspensions for violence, abstain from drug and alcohol use, have excellent attendance, and have a genuine interest in and compassion for all types of people. An interview is required for admission to this program. This program has a dual enrollment with Central Maine Community College in Medical Terminology. Costs include uniforms, white shoes/sneakers, and a watch with a second hand (approximately \$100.00.) This course fulfills the Health requirement. **COURSE #7032** 

# **HEALTH SCIENCE CAREERS**

NOTE: afternoon only

This course fulfills the Health requirement.

Health Science Careers is a one-year program for juniors or seniors interested in pursuing a career in the health care field. Academically driven, this class allows for an in-depth study of pathophysiology (disease process), anatomy and physiology, infection control, communication skills, safety, medical law and ethics human growth and development and nutrition.

Class includes medical terminology and students may receive three credits as SMCC in the Nursing Assistant major. Students will explore a variety of health careers, including nursing, medicine, veterinary medicine, dental careers, radiology, pharmacology, emergency medical services, mortuary science, physical and occupational therapy, recreational therapy, sports medicine, chiropractic and many others. Through research projects, field trips, and guest speakers, students will develop a clear vision of the many health care career choices that exist in the health care field. A student in this class must have excellent attendance and reliable work habits, high school level reading skills, no record of criminal convictions or school suspensions for violence, good interpersonal and communication skills, and a sincere desire to research and discover the complex offerings in the health care industry. This program has a dual enrollment with Central Maine Community College in Medical Terminology. This course fulfills the Health requirement. **COURSE #7033** 

#### METAL FABRICATION AND WELDING

Metal Fabrication and Welding program combines several trades. Topics covered include safety, measurement, general metallurgy, bench work, layout, and blueprint reading. Welding processes covered are shielded metal arc welding, metal inert gas (MIG) welding, tungsten inert gas (TIG) welding, flame cutting, along with electrode use and selection. Community college credits may be awarded for blueprint reading and basic welding courses while preparing the student for qualifications towards American Welding Society structural plate certification. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels. **COURSE #7050** 

#### OUTDOOR POWER

Outdoor Power technicians inspect, service, and repair small engines, recreational vehicles, and motorcycles. Students in this course learn to use hand and power tools and various precision measuring instruments, basic engine theory, two and four cycle engine overhaul, lubrication, cooling systems, electrical systems, carburetor and fuel systems. Types of equipment worked on include but are not limited to motorcycles, snowmobiles and ATVs. Students are encouraged to participate in Skills USA (student organization) to enhance their leadership opportunities and compete at both state and national levels.

**COURSE #7052** 

#### PRE-APPRENTICESHIP PROGRAM

To be eligible for the program, students must be employed or willing to do an extended shadowing experience. Pre-Apprenticeship involves planned on-the-job training experience under academic studies in subjects related to the occupation. The occupations included require a wide range of diverse skills, knowledge, maturity, and independence of judgment. It gives workers entering an occupation thorough experience, both on and off the job. All the practical and theoretical aspects of the work required in a skilled occupation are covered in detail. Pre-Apprenticeships can lead to a full Maine State apprenticeship, post-secondary education, and/or permanent employment with the participating employer. Through Pre-Apprenticeship, students will in many cases have access to professional skill level positions with area employers. An opportunity to participate in a skill area not currently offered at Region Ten exists through this program. Pre-Apprenticeship requires the recommendation of your instructor if you are in a Region Ten program, or your guidance counselor if you are not already enrolled at Region Ten. **COURSE #7080** 

# MT. ARARAT HIGH SCHOOL MISSION STATEMENT

At Mt. Ararat High School, our vision is for every student to explore and work toward fulfilling his or her unique potential.

In order to achieve this vision, it is our mission to

- ensure challenging and personalized learning;
- teach the essential skills necessary to meet the demands of a changing world;
- provide a safe, nurturing, and intellectually vibrant environment where diversity is valued and everyone is respected; and
- work in partnership with families and the community to promote the health and development of the whole individual.

# **Academic Expectations for Student Learning**

All Mt. Ararat High School graduates will be self-directed and lifelong learners. As such, they will be

- · effective communicators,
- quality workers,
- · problem solvers, and
- integrative and informed thinkers.

# Civic and Social Expectations for Student Learning

All Mt. Ararat High School graduates will be responsible and involved citizens. As such, they will

- assume responsibility for their own behavior and utilize appropriate conflict resolution skills,
- demonstrate an understanding of the rights, duties, and responsibilities of citizenship in a democratic society, and
- be respectful and tolerant.