ATHOL HIGH SCHOOL



PROGRAM OF STUDIES
2026-2027

ATHOL-ROYALSTON REGIONAL SCHOOL DISTRICT

ATHOL HIGH SCHOOL

2363 Main Street Athol, Massachusetts 01331

www.arrsd.org/athol-high-school/

Mr. David P. King, Principal
Ms. Amanda Pagar Wein, Assistant Principal
Mr. Joshua Talbot - Dean of Students
Tel. 978-249-2435 Fax 978-249-2422

Dear Students and Parents/Guardians:

Please review the information contained in the 2025-2026 Program of Studies carefully as you prepare to help your student select courses for the next school year. It is important that you put thought into the course selection process so that your student's schedule puts them on a path to attain their future goals while appealing to their personal interests.

Please pay careful attention to the graduation requirements outlined on pages 15-16. I encourage all students to challenge themselves. If you are unsure of which course level to take, I urge each student to take the more challenging level. You want to make sure that you do not limit your options for tomorrow by making haphazard decisions today.

Also, please make sure when you are completing your course selection that you rank your elective choices in order of preference. The Program of Studies outlines the courses that may be offered at Athol High School. The courses that are built into the schedule are based on student interest and teacher availability. The course selection sheets play a vital role in shaping the schedule for the next year; failure to complete them accurately may result in a master schedule that does not meet the needs of the student body as well as it possibly could.

Finally, we are always looking for ways to improve the quality of education we offer here at Athol High School. Please be advised that the Program of Studies reflects the schedule and course offerings that we currently anticipate for next year. As the year goes on, if there are any major changes that develop, we will communicate these changes and the potential impact on your student's schedule in a timely manner.

Thank you for your cooperation.

Sincerely,

David P King

David P. King
Principal

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ATHOL HIGH SCHOOL ADMINISTRATIVE DIRECTORY

ATHOL HIGH SCHOOL
ATHOL-ROYALSTON REGIONAL SCHOOL DISTRICT
2363 MAIN STREET ATHOL, MA01331

ATHOL-ROYALSTON REGIONAL DISTRICT ADMINISTRATION

Matthew Ehrenworth, Superintendent of Schools — Telephone # 978-249-2400

Cynthia Kennedy, Assistant Superintendent

Christie Fontaine, Director of Pupil Services — Telephone # 978-249-2403

ATHOL HIGH SCHOOL ADMINISTRATION

David P. King, Principal — Telephone # 978-249-2435
Fax # 978-249-2422

Amanda Pagar Wein, Assistant Principal

Joshua Talbot, Dean of Students

ATHOL HIGH SCHOOL BUILDING INSTRUCTIONAL LEADERSHIP

Kelly Shamgochian, Academic Coach

Amanda Pagar Wein, Assistant Principal

Joshua Talbot, Dean of Students

Bethany Hager, Student Services Chair

Amy Koziak, Special Education Department Chair

Kasey Teixeira, English Department Chair

Sarah Swan, Math Department Chair

Jeff Whitney, Social Studies Department

Alexa Stone, Science/Technology Dept Chair

ATHOL HIGH SCHOOL STUDENT SERVICES DEPARTMENT

Bethany Hager, School Counselor — Telephone # 978-249-2436
Fax # 978-249-7217

Iliana Helps, School Counselor

Jaclyn Mickiewicz, School Counselor

Sean Fisher, School Counselor

Tom Shamgochian, College & Career Program Readiness Coordinator

Cynthia Hughes, Administrative Assistant

ATHOL-ROYALSTON
VISION OF A GRADUATE

CRITICAL THINKERS

I can:

- **Acquire new knowledge and skills**
- **Ask relevant questions to deepen my understanding**
- **Evaluate the credibility of information presented through all media**
- **Analyze and interpret information to reach an informed conclusion**
- **Support my claims with evidence**
- **Identify and consider alternative approaches to problem solving**
- **Reflect on my own thinking process and identify areas of improvement**

ACTIVE CITIZENS

I can:

- **Positively impact my community through intentional acts of service and humanity**
- **Value and promote diversity**
- **Work towards a future rooted in fairness, compassion, and collective responsibility**
- **Advocate for my beliefs while remaining respectful of all opinions**
- **Further our democracy by remaining informed and engaged**
- **Demonstrate responsible digital citizenship**
- **Act with integrity, empathy, and respect**

SKILLED COMMUNICATORS

I can:

- **Listen actively and ask reflective questions to further discussions**
- **Express myself clearly and confidently through verbal and/or nonverbal means**
- **Demonstrate strong reading, writing, and media literacy skills**
- **Collaborate with others around a shared goal**
- **Build positive relationships and manage conflict**
- **Advocate for my needs effectively**
- **Use technology appropriately to enhance my communication**

EMPOWERED INDIVIDUALS

I can:

- **Serve as an agent of change with determination and resilience**
- **Discover and cultivate my passions**
- **Recognize my potential and set goals to achieve it**
- **Take responsibility for my actions and learn from my mistakes**
- **Work independently and manage my time effectively**
- **Make informed decisions regarding money management and finances**
- **Develop skills to support healthy, independent living and promote my own wel**

CORE VALUES AND LEARNING EXPECTATIONS

ATHOL HIGH SCHOOL STATEMENT OF CORE VALUES

Athol High School is committed to providing the academic, civic and social foundation for students to become life-long learners and productive, creative and healthy citizens of a 21st century global society. We strive for students to understand the value of academic excellence, integrity, personal responsibility, self-discipline, and a strong work ethic.

ATHOL HIGH SCHOOL LEARNING EXPECTATIONS

Academic

Students will be able to:

Carefully and critically read for understanding and application. Write effectively in a variety of forms.

Use a variety of technologies to appropriately retrieve, synthesize and communicate information. Collaborate productively in a variety of learning environments. Analyze, interpret, and evaluate problems using a variety of resources and strategies.

Civic/Social

Students will be able to:

Understand and exercise their rights and responsibilities as students and as citizens. Demonstrate growth of character through personal responsibility, ethical behavior, and personal health and fitness.

Beliefs About Student Learning

At Athol High School we believe learning happens best when students…

- Develop a strong work ethic and sense of academic integrity.
- Take risks to push beyond current knowledge.
- Develop self-confidence, self-respect and dignity.
- Engage in goal setting, self-assessment and reflection.

At Athol High School we believe learning happens best when Athol High School staff…

- Provide an atmosphere of mutual respect.
- Connect learning to the world beyond high school.
- Have clear expectations for student academic performance.
- Provide individual support in and beyond the class period.
- Connect learning between subjects, courses and content areas.
- Inspire students to learn and make learning interesting and engaging.
- Model behaviors, actions and thinking for students.

AHS Learning Expectation Assessment Rubrics

Collaborate Productively in a Variety of Learning Environments **[Collaboration]**

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
Participation	Consistently accepts and fulfills individual role with group. Extensively contributes knowledge, opinion, and skills.	Frequently accepts and fulfills individual roles within the group and consistently contributes knowledge, opinion, and skills.	To some degree, accepts and fulfills individual roles within a group and occasionally contributes knowledge, opinion, and skills.	Rarely accepts and fulfills individual role within group and seldom, if ever, contributes knowledge, opinion, and skills.
Organization	Consistently remains on task, completing work thoroughly. Is consistently punctual with deadlines and demonstrates exceptional preparation and planning.	Frequently stays on task, completing work. Is mostly punctual with deadlines and demonstrates appropriate preparation and planning.	Stays on task at times, but is inconsistent with regard to the meeting of deadlines. Further work in preparation and planning needed.	Does not stay on task and ignores deadlines. Preparation and planning are virtually nonexistent.
Respect/Maturity	Consistently values the knowledge, opinions, and skills of all group members and encourages the contributions of all. Is respectful of the work environment. Demonstrates integrity and self-discipline.	Values the knowledge, opinions, and skills of group members. Is respectful of the work environment and demonstrates positive personal behavior.	Sometimes values the knowledge, opinions, and skills of group members. Further demonstration of a respect for the work environment needed.	Does not reflect a value for the knowledge, opinions, and skills of others. Demonstrates a lack of respect for the work environment.
Leadership	Consistently willing to take a leadership role, keeping others on track. Is positive and encouraging with others.	Takes an appropriate role in the group. Supports others by being positive and productive.	Is somewhat positive and productive with others in the group setting.	Detracts from the group dynamic and distracts others in the work setting.
Creativity	Is innovative in the group setting and is keenly aware of the benefits that collaboration can yield.	Demonstrates critical thinking and sees the potential value of individuals working together.	Can sometimes reflect creative ideas that assist the group.	Seldom offers ideas that assist the group in its goals.

AHS Learning Expectation Assessment Rubric

***Analyze, Interpret, and Evaluate Problems Using a Variety of Resources and Strategies* [Critical Thinking]**

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
Identifying Problems	Identifies and defines multiple and/or complex problems.	Is able to identify and define a problem.	Capable of identifying and defining simple problems.	Incapable or unwilling to identify and define problems.
Brainstorming Strategies	Is able to brainstorm a variety of complex and sophisticated solutions.	Can brainstorm possible solutions.	Generally relies on the easiest or quickest solution.	Unable or unwilling to consider solutions.
Organizing Information	Identifies a variety of potentially important information, gathers highly relevant information and organizes it effectively.	Identifies, gathers, and organizes information that is important to solve a problem.	Has difficulty identifying, gathering, and organizing information important to solving a problem.	Cannot effectively identify, gather, and organize information to solve a problem.
Using Logical Progression	Independently creates and carries to completion complex, multi-step tasks.	Carries out multi-step tasks appropriately.	Can complete some tasks but needs frequent monitoring and assistance.	Unable or unwilling to take needed steps with a task.
Recognizing Fact from Opinion	Distinguishes subtle differences between fact and opinion, and is able to articulate thoughts on why one differs from the other.	Able to use evidence to distinguish fact from opinion.	Can sometimes discern fact from opinion.	Has difficulty discernin g fact from opinion.
Use of Reason	Uses sound and thorough reasoning and is able to make subtle connections.	Consistently able to use reasoning and to make connections.	Has some difficulty using reasoning and making more obvious connections.	Uses questionable reasoning and is unable to make connections.
Appropriate Risk	Chooses most challenging learning experiences and participates in a way that advances critical thinking. Learn from mistakes.	Take academic risks by welcoming challenges. Participates actively and learns from mistakes.	Avoids academic challenge and often unwilling to engage in tasks.	Unwilling to take on academic challenges.
Select/Test Solutions	Selects, justifies, and evaluates a sophisticated and accurate solution and is able to test, analyze, and adapt that solution.	Selects, justified, and evaluates an accurate solution and is able to test and analyze a possible solution	Has difficulty identifying an accurate solution. Is quick to select or dismiss possible solutions and tends to rely on others.	Unable or unwilling to test any solutions.

AHS Learning Expectation Assessment Rubric

Carefully and Critically Read for Understanding and Application **[Reading]**

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
Comprehension	Uses active reading strategies independently, understands abstract concepts, makes sophisticated inferences, and demonstrates a mature understanding of material.	Uses active reading strategies with some support and is able to understand material and find meaning.	With support and/or significant effort, is able to understand most essential elements of material.	Shows limited and/or inaccurate understanding of written text.
Fluency	When applicable, read aloud with strong and accurate expression, even with sophisticated language.	When applicable, read aloud with appropriate expression and knowledge of vocabulary.	When applicable, read aloud with a limited understanding of appropriate expression.	When expected, students are unable to properly articulate the reading of a given text.
Vocabulary	Readily uses advanced knowledge of prefixes, suffixes, and roots to understand vocabulary in unfamiliar material.	Uses knowledge of prefixes, suffixes, and roots to understand vocabulary in unfamiliar material.	Occasionally uses knowledge of prefixes, suffixes, and roots to understand vocabulary in unfamiliar material.	Is unable to access knowledge of prefixes, suffixes and roots to understand vocabulary in unfamiliar material.
Detail/ Evidence	Readily identifies relevant and pertinent information necessary to draw appropriate and mature conclusions.	Identifies the relevant and pertinent information necessary to draw accurate conclusions.	Occasionally, or with support, identifies the relevant and pertinent information necessary to draw conclusions.	Rarely identifies the relevant and pertinent information necessary to draw conclusions about a given text.
Essential vs. Non-Essential	Easily and quickly distinguishes relevant aspects of the text, even those subtle in nature.	Accurately identifies pertinent information from the less essential.	With some guidance and/or considerable effort, can distinguish key vs. superfluous information.	Even with considerable support, the reader is unable to identify areas of a given text that are more meaningful than others.
Theme/ Main Idea	In a sophisticated manner, Identifies the author's intent on meaning or message and can articulate thoughts clearly.	Identifies the main idea of a text and can speak to author intent.	Can identify author intent or the main idea/message in a work with some guidance.	Despite assistance, cannot understand the author's intent or the meaning/message of a text.
Point of View/ Bias	Possesses knowledge and context of material that allows for a mature analysis of the text with regard to potential bias.	Successfully identifies a writer's point of view and can discern potential writer bias.	Accepts most information as factual and has some difficulty discerning potential author bias.	Is generally unable to identify writer bias, even when abundantly clear.

Making Connections	Is able to draw sophisticated connections between studied texts and other texts, ideas, or events.	Is able to see connections between a studied text and other material, ideas, or events.	Occasionally sees how the ideas of written text connect to other works, ideas, or events.	Has significant difficulty seeing how a studied text has any meaning beyond itself.

AHS Learning Expectation Assessment Rubric
***Write Effectively in a Variety of Forms* [WRITING]**

	Exceeding	**Meeting**	**Partially**	**Not Meeting**
Content	• Thesis is vivid, sophisticated, and open. • Skillful use of evidence exceeds the requirement and highlights the connection between texts. • Makes innovative connections beyond the texts to the world around us	• Thesis is complex, open, and insightful. • Claim and counterclaims are developed thoroughly and fairly • Evidence from texts is synthesized and supports the thesis • Makes connections beyond the text to the world around us	• Thesis is present, but is not fully developed or insightful. • The thesis and counterclaims are somewhat developed, but could be more specific. • Some evidence is present, but not all of it supports the thesis, or isn't fully explained how it connects to the thesis. • No connections are made beyond the text to the world around us	• Thesis is either not present or does not appropriately respond to task, audience, and/or purpose • Relevant evidence is not present • Analysis–if present–fails to advance the claim (summary or is not clearly connected to line of reasoning)
Organization/ Style/ Development	• Introduction hooks the reader in a vivid and insightful way that clearly presents the topic. • Claim(s) and counterclaims are addressed fairly and thoroughly, supplying the most relevant data and evidence. • Audience and purpose has clearly been addressed. • Conclusion leaves the reader something new and innovative to think about.	• Intro with hook, background/intro to the topic, then thesis. • Body paragraphs include: claim, context/background info, evidence, analysis, clincher and transition. • Conclusion that restates thesis/claim, restates main points, concluding sentence that brings their ideas into a broader (worldwise) conversation.	• An introduction is present, but doesn't include a hook or relevant background. • Body paragraphs include a claim and some evidence and analysis, but do not consistently connect back to the claim/thesis; missing clinchers and/or transitions. • Conclusion restates the thesis/claim, but doesn't bring their ideas into a broader (wordwise) conversation.	• There is no introduction or thesis. • Ideas do not flow from one paragraph to another; disorganization impedes understanding. • Transitions are not used; the essay is not cohesive. • There is no conclusion or broader connection to real world application.
Grammar/ Mechanics	• Consistent control of grammar, usage, and mechanics • Consistent control of a variety of sentence structures • Accurate Citations	• There may be minor grammatical errors, but they don't impact the reader's understanding • Demonstrates command over the English language with variety of sentence length and structure	• Some proofreading, use of proper grammar rules evident, but errors do not impede understanding	• Little to no command over the English language • Pervasive errors prevent reader from understanding ideas communicated • No evidence of citations or a works cited page.

		• Accurate citations	• Most citations are accurate, but there are some minor errors (citing lines correctly or in the works cited page)	

AHS Learning Expectation Assessment Rubric

Understand and Exercise Their Rights and Responsibilities as Students and as Citizens **[Responsibility]**

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
School Rules and Expectations	Always adheres to the rules outlined in the student handbook.	Nearly always adheres to the rules outlined in the student handbook.	Generally, adheres to the rules outlined in the student handbook.	Rarely adheres to the rules outlined in the student handbook.
Understanding of Course and/ or Teacher Expectations	Always adheres to course expectations as outlined by the teacher.	Nearly always adheres to course expectations as outlined by the teacher.	Generally adheres to course expectations as outlined by the teacher.	Rarely adheres to course expectations as outlined by the teacher.
Involvement in the School Community	Is actively involved in the school community, making important contributions and/or demonstrating leadership.	Is involved in the school community through participation in organizations and activities.	Will on occasion get involved in school groups or activities, but is often on the periphery of meaningful involvement.	Rarely, if ever, makes any attempt to be involved in any school groups or activities.
Citizenship	Is actively involved in the community, making important contributions and/or demonstrating leadership.	Is involved in the community through participation in organizations and activities.	Will on occasion get involved in the community, but is often on the periphery of meaningful involvement.	Rarely, if ever, makes any attempt to be involved in the community.

Athol High School Learning Expectation Assessment Rubric

Demonstrate Growth of Character through Personal Responsibility, Ethical Behavior, and Personal Health and Fitness **[Character]**

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
Personal Responsibility	Demonstrates an admirable level of integrity and is a role model for others.	Demonstrates integrity and makes appropriate decisions.	Occasionally makes decisions that could be regarded as questionable or misguided.	Is chronic in his or her misbehavior, making decisions that can be construed as destructive to themselves and/or others.

Ethical Behavior	In the school and in the community, the student would be regarded as a model individual with regard to decision-making and behavior.	Is generally regarded as a quality individual, based on the behaviors that he or she exhibits in the school and in the community.	Occasionally makes questionable decisions that have a negative effect on the individual and others in the school and in the community.	Regularly makes questionable decisions that have a negative effect on the individual and others in the school and in the community.
Personal Health and Fitness	Consistently engages in behavior that promotes positive physical and emotional health.	Typically engages in behavior that promotes positive physical and emotional health.	Engages in behavior that negatively affects the quality of the individual's personal health or the health of others.	Clearly engages in behaviors that place the individual and others at significant health risk.

Athol High School Learning Expectation Assessment Rubric

Use a Variety of Technologies to Appropriately Retrieve, Synthesize, and Communicate Information

[Technology]

	Advanced	**Proficient**	**Needs Improvement**	**Deficient**
Knowledge of Technological Hardware	Understands and is able to use technological equipment appropriately and independently and only requires support in cases of malfunction.	Understands and is able to use technological equipment appropriately and rarely needs support.	Has a limited understanding of the technology that is used and may need support.	Does not understand the technology that is required for a given assignment and regularly needs support.
Use of Software/Internet Programs	Understands and is able to use software independently and only requires support in cases of malfunction.	Understands and is able to use software appropriately and rarely needs support.	Has a limited understanding of the software that is used and may need support.	Does not understand the software that is required for a given assignment and regularly needs support.

Access and Use of Information	Is sophisticated in the manner in which he or she searches for information and can skillfully determine the quality of the information that is found. When required, student is able to document information properly.	Is able to properly search for accurate information and can discern quality research from irrelevant or suspect information. When required, student can acknowledge sources correctly.	Searches for information but has difficulty determining which sources and information are appropriate for a given purpose. Has difficulty acknowledging sources correctly.	Cannot properly search for information for a given purpose. Has little ability to properly document information.
Responsible Behavior	Complies with the safe, responsible, and ethical rules regarding the use of technology.	Mostly complies with the safe, responsible, and ethical rules regarding the use of technology.	Inconsistently complies with the safe, responsible, and ethical rules regarding the use of technology.	Rarely complies with the safe, responsible, and ethical rules regarding the use of technology.

CLASS SCHEDULE AND STUDENT COURSE LOAD

Athol High School operates on a five period schedule.

Students are expected to carry a full course load at all times throughout the year, in addition to an Advisory class. Courses meeting for one period for the below designated length of time will receive the following credits. AP (Advanced Placement), DE (Dual Enrollment)

- AP Full-year: 3.0 credits (1.5 per semester)
- Full-year: 2.0 credits
- DE Semester: 1.5 credits
- Semester: 1.0 credit
- Quarter: 0.5 credit

Advisory is a credit bearing graduation requirement which will be Pass/Fail. Students will be led through curriculum and activities related to College & Career Readiness, Social Emotional Learning, and Academic Success.

HOMEWORK POLICY

Homework is defined as written or non-written tasks assigned by a teacher to be completed outside the classroom. These assignments should complement class work and be relevant to the curriculum. Homework is a natural extension of the school day and an important part of a student's educational experience. Homework encourages self-discipline, pride in one's work, positive self-esteem, and interest in learning. Homework reinforces the Athol High School home/school connection.

GRADUATION & PROMOTION REQUIREMENTS

The following graduation requirements outline the course specific expectations for all students. Students are required to fulfill a community service component. Information regarding the community service requirement is located in the section below.

GRADUATION REQUIREMENTS

Subject	Credits/Hours
English	Minimum of 6.0 Credits, must take grade-specific English course every year
Math	Minimum of 6.0 Credits, must take grade-specific math course every year
Science	Minimum of 5.0 credits, must be from at least 2 of the following categories: Life Science, Physical Science, Computer Science, or Tech/Engineering and must include 3 lab-based courses
Social Studies	Minimum of 4.0 Credits, must include 2 credits of US History, 1 credit of World History, and 1 credit of American Government
Physical Education	Minimum of 3.0 Credits (Including PE/Health I & II). Must take at least one course each year.
Electives	Varies
Advisory	4.0 Credits
Community Service	20 Hours** (This represents 5 hours/year and may be prorated for transfer students).
Total	**40 Credits**

PROMOTION REQUIREMENTS

Graduation	40 Credits
Senior	30 Credits
Junior	20 Credits
Sophomore	10 Credits

COMMUNITY SERVICE

In addition to the credit requirements above, students must fulfill a community service requirement to graduate. Students must complete five community service hours for each year that they attend Athol High School for a total of 20 hours.

To receive credit for your community service hours a completed community service form must be turned into the office. Once the form is verified, the hours will be recorded.

Competency Determination: Athol Royalston Regional School District

Section 1: Competency Determination Requirements

Athol High School students must earn full credit and show mastery (i.e., mastery shall mean a student successfully completes the (1) final assessment for a course; or (2) a capstone or portfolio project) in the content areas as evidenced by a final grade of 60 or better, in courses taken in grades 9-12, as follows:

Content Area	Coursework Requirement	Course Options to meet Requirement
English Language Arts	The equivalent of two years of high school English language Arts courses.	a. English 9A & 9B b. English 10A & 10B or AP Seminar c. English 11 d. English 12 e. Futures ELA
Mathematics	The equivalent of two years of high school mathematics courses.	a. Algebra 1A & 1B b. Geometry c. Integrated Math I d. Integrated Math II e. Algebra II f. Futures Math g. Integrated Algebra/Geometry h. Statistics and Probability i. Pre Calculus
Science	The equivalent of one year of any one of the following disciplines: Biology, Chemistry, Physics.	a. Intro to Biology b. Biology c. Intro to Physics d. Physics e. Chemistry
Beginning with the graduating Class of 2027, the District's Competency Determination requirements includes the following:		
History	The equivalent of a one year United States history course.	a. US History I b. US History II c. American Government d. AP US History e. Futures History

Students who do not meet the required passing grades in the above prescribed courses may enroll in summer school, credit recovery courses, or be scheduled to take additional coursework by their guidance counselor that meet the same Massachusetts Curriculum Framework Standards. These opportunities will provide a student who has yet to meet the CD requirements additional opportunities to meet this state standard for a diploma. If the District is unable to document a student's prior coursework, a student will be allowed to meet the Competency Determination requirements by:

A. Attaining a qualifying score of at least "meeting expectations" or "exceeding expectations" achievement level on the relevant high school MCAS assessment; or

B. Meeting the standard for a substituted equivalent that the District certifies satisfies the same academic standards.

Section 2: Additional Considerations

A. Students with Disabilities

Students with disabilities, whether in-district or out-of-district, are provided specialized support, modifications, or alternative demonstration methods as part of the Competency Determination requirements.

In order to be eligible for a Certificate of Attainment from Athol High School instead of a diploma, a student who does not meet the state Competency Determination must satisfactorily complete the local graduation requirements and any additional criteria set forth by the Massachusetts Department of Elementary and Secondary Education.

B. English Learners

English learners are enrolled in inclusive classes for all course requirements and provided additional support, modifications, or alternative demonstration methods from the District as part of the Competency Determination requirements.

C. Transfer Students

In the event that a student transfers into Athol High School at any point during their high school career, a transcript review will be conducted by a Guidance Counselor. The Assistant Principal will review their recommendation to ensure that the coursework from the previous school is aligned with AHS coursework for the Competency Determination prior to the decision as to whether the Competency Determination has been satisfied being conveyed to the student and their family.

Section 3: Appeals Process

If the Competency Determination is not granted and the student and family disagree, an appeal of the decision may be made to the Principal. The Principal shall be the arbiter for all disagreements regarding the transcript review, and the principal's decision on transcript reviews as related to Competency Determination will be final.

Section 4: Diploma Request Process for Previously Enrolled Students

Any current or former student may request a transcript review by contacting the school's Guidance Department at (978) 249-2435 or guidance@arrsd.org.

COURSE LEVELS AND WEIGHTING

All students are encouraged to challenge themselves academically. As students build their high school transcripts, the level of courses that they take will play a role in determining what options are available to them. Students who wish to attend college should be taking at least college preparatory (CP) courses. Students are encouraged to take as many honors and advanced placement (AP) courses as possible to help gain admission to competitive colleges.

There are multiple levels of course designation that students can earn at Athol High School.

Advanced Placement (AP): AP courses are rigorous courses that follow the guidelines set forth by the College Board. Students enrolled in AP courses have the opportunity to earn college credits based on their scores on AP exams. Students must be aware that AP courses have specific requirements; students should look at prerequisites for courses and plan accordingly. All of these courses require some independent summer preparation and students are required to take the AP exams in May. There is a fee associated with each AP exam set by the College Board that must be paid by the deadline set by Athol High School. However, **no student should refrain from taking an AP course due to cost**. Please see the principal if the AP exam cost is an issue. An AP Contract will need to be signed by both the student and the parent prior to starting the course.

Dual Enrollment/College Courses (DE): Dual enrolled or college level courses which are accessible to all students that meet the placement requirements will be weighted as AP courses.

Honors (H): Honors courses or Honors designation are more rigorous than college preparatory classes. These classes are designed to challenge students and potentially prepare them for AP courses.

College Preparatory (CP): College preparatory classes align to the appropriate state and/or national standard in order to provide students with the necessary knowledge and skills to succeed in college.

Standard (STD): Standard courses align to the appropriate state and/or national standards but focus on key standards in order to build a foundation for students in the particular area. Standard courses also include those electives not recognized as college preparatory by the NCAA clearinghouse.

GRADE POINT AVERAGE AND CLASS RANK

The level of courses a student completes and the grades earned in those courses are used to determine the student's Grade Point Average (GPA). A student's GPA is a critical item that is commonly used for college admissions and for scholarship awards. A student's class rank is determined by comparing their cumulative weighted GPA to the other members of the student's class. The following table illustrates the corresponding weighted GPA values for each grade and course level:

The weighted GPA values according to earned grades and course level:

Letter Grade	Numerical Equivalent	Dual Enrollment Courses	Advanced Placement	Honors	College Preparatory	Standard
A+	98-100		5.3	4.8	4.3	4
A	93-97	5.3 (95-100)	5	4.5	4	3.7
A-	90-92	5 (90-94)	4.7	4.2	3.7	3.4
B+	86-89	4.3	4.3	3.8	3.3	3
B	83-85	4	4	3.5	3	2.7
B-	80-82	3.7	3.7	3.2	2.7	2.4
C+	76-79	3.3	3.3	2.8	2.3	2

Letter Grade	Numerical Equivalent	Dual Enrollment Courses	Advanced Placement	Honors	College Preparatory	Standard
A+	98-100		5.3	4.8	4.3	4
A	93-97	5.3 (95-100)	5	4.5	4	3.7
C	73-75	3	3	2.5	2	1.7
C-	70-72	2.7	2.7	2.2	1.7	1.4
D+	66-69	2.3	2.3	1.8	1.3	1
D	63-65	2	2	1.5	1	0.7
D-	60-62	1.7	1.7	1.2	0.7	0.4
F	0-59	0	0	0	0	0

The weighted GPA is calculated at the end of every semester using the following method: 1. Determine the appropriate weighted GPA value for each course from the table above. 2. Multiply the weighted GPA value for each course by the number of credits earned for the course. 3. Total the products from step 2. 4. Divide by the total number of course credits attempted.

PREPARING FOR YOUR FUTURE

In addition to fulfilling graduation requirements, it is important to select courses that will prepare you for the future goal. We highly recommend you connect with your guidance counselor to plan accordingly for your future.

MASSCORE

The Massachusetts Department of Elementary and Secondary Education have developed a recommended program of studies for students to follow. The Massachusetts High School Program of Studies (MassCore) is intended to help the state's high school graduates arrive at college or the workplace well prepared and reduce the number of students taking remedial courses in college. MassCore recommends a comprehensive set of subject area courses and units as well as other learning opportunities to complete before graduating from high school.

The recommended program of studies includes: four years of English, four years of math, three years of a lab-based science, three years of history, two years of the same foreign language, one year of an arts program and five additional "core" courses such as business education, health, and/or technology. MassCore also encourages additional learning opportunities including AP classes, dual enrollment, a senior project, online courses for high school or college credit, and service or work-based learning. Physical Education shall be taught as a required subject in all grades for all students in the public schools for the purpose of promoting the physical well-being of such students. It is strongly recommended that all students select their courses in an effort to meet the MassCore requirements.

For more information on Masscore visit the following website:
https://www.doe.mass.edu/ccte/ccr/masscore/

COLLEGE ENTRANCE REQUIREMENTS

High school course selections may limit or enhance college entrance opportunities. Students are urged to take as demanding a load as possible in high school. Selective colleges will want to know the difficulty of courses as well as the grades earned in those courses. Private four-year colleges may establish their own admission criteria. Students are encouraged to explore colleges that they may be interested in attending to review the course, grade point average, and standardized test score requirements. The requirements for four-year state colleges and two-year colleges are summarized below.

FOUR-YEAR STATE COLLEGE ENTRANCE REQUIREMENTS

The minimum undergraduate admissions standards for the state universities and UMass campuses were established for several primary reasons: first, to emphasize the importance of successfully completing a rigorous academic course of study in high school (example MassCore, a recommended program of studies that includes specific numbers and types of courses across academic subjects); second, to ensure that students are well prepared to begin college courses and their path to degree; and third, to increase consistency of undergraduate admissions across the state universities and UMass campuses.

Again, these standards are minimum requirements. Eligibility for undergraduate admission is not an entitlement of admission for any applicant; as such, meeting the minimum standards does not guarantee admission, since admissions officers consider a wide range of factors when reviewing students' applications, and the state universities and UMass campuses can establish additional requirements. For information about any additional requirements, please contact the admissions office at the institution(s) to which the student is interested in applying.

Note: These standards do not apply to the community colleges, which implement open admissions and enrollment policies. For additional information about admissions policies at the community colleges, please contact the admissions office at the institution(s) to which you are interested in applying.

FRESHMAN APPLICANTS

The admissions standards for freshmen applicants at Massachusetts 'public four year institutions have three primary components:

1. Successful completion of required academic courses in specific subjects; and

2. A minimum average and weighted grade point average (GPA) earned in high school level academic courses; and

3. The submission of SAT or ACT scores

Academic Course Requirement

All freshman applicants are required to successfully complete the following courses in each academic subject over their four years of high school. Applicants are required to have completed 17 courses. This reflects the required completion of four courses of mathematics in high school including mathematics in the senior year.

English	4 courses

Mathematics	4 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework) including mathematics during the final year of high school
Sciences	3 courses (from Life Science and/or Physical Science and/or Technology/ Engineering), including 3 courses with laboratory work
History /Social Sciences	4 Courses (Including US History1, US History 2 and World History. ***AP US History can replace US 2 and AP World History can replace World History.
Foreign Languages	2 courses (in a single language)
Electives	2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

Note: comparable courses are defined as coursework that is equal to or beyond the content defined in the Massachusetts Curriculum Frameworks.

If a high school designates a course as a comparable mathematics course or designates a science course as a science laboratory course, college admissions officers must accept that the course meets the above requirements. Technology and Engineering courses should be identified and High School transcripts should clearly indicate that the course(s) are mathematics or science courses.

MINIMUM GPA REQUIREMENT

The minimum average GPAfor freshman applicants, weighted for accelerated (Honors andAdvanced Placement) courses, is 3.0 for both the state universities and the UMass campuses. Calculating the weighted GPA is a process conducted by admissions offices and does not reflect policies and practices in place in high schools.

This GPA is based on all academic courses completed and grades received for courses in which the student is currently enrolled (for example, mathematics courses in which the student is enrolled during the senior year of high school).

SAT/ACT SCORE REQUIREMENTS FOR APPLICANTS

All freshman applicants who are within three years of their high school graduation may be asked to submit their SAT scores (for Critical Reading and Mathematics) orACT scores.
In conjunction with the College Board, the Department of Higher Education has included new sliding scale tables for the State Universities and the University of Massachusetts to align the NEW SAT scores with a sliding weighted GPA and ACT score. Offices of admissions will review these OLD SAT scores and NEW SAT scores with weighted GPA and ACT according to the appropriate OLD SAT or NEW SAT sliding scale table. All freshman applicants (including international) who meet the minimum average weighted GPA of 3.0 and are within three years of their high school graduation may be asked to submit their SAT scores or ACT scores. International freshman students may be exempt if it is not possible to take these tests due to extreme hardship.

For freshman applicants (including international) who do not meet the minimum weighted 3.0 GPA requirement, they must earn the following SAT orACT scores in order to be eligible for admission.

NOTE:AN APPLICANT WITH A HIGH SCHOOL MINIMUM WEIGHTED GPA BELOW 2.0 MAY NOT BE ADMITTED TO A STATE UNIVERSITY OR UMASS UNDERGRADUATE CAMPUS.

SAT SCORE SLIDING SCALE TABLE FOR UNIVERSITY OF MASSACHUSETTS

		ACT Score
2.51 - 2.99	1030	20
2.41 - 2.50	1070	21
2.31 - 2.40	1110	22
2.21 - 2.30	1140	23
2.11 - 2.20	1180	24
2.00 - 2.10	1220	25

SAT TOTAL SCORE SLIDING SCALE TABLES FOR STATE UNIVERSITIES

Campuses Weighted Average GPA	Combined NEW SAT Score (Evidenced Based Reading & Writing and Mathematics)	ACT Score
2.51 - 2.99	990	19
2.41 - 2.50	1030	20
2.31 - 2.40	1070	21
2.21 - 2.30	1110	22
2.11 - 2.20	1140	23
2.00 - 2.10	1180	24

All freshman applicants who meet the minimum average weighted GPA requirement of 3.0 and are within three years of their high school graduation must submit their SAT scores (for critical reading and mathematics) orACT scores.

Applicants from a high school outside of the US who meet the minimum average weighted GPA requirement of 3.0, and are within three years of their high school graduation, must also submit required SAT or ACT scores unless it is not possible to take these tests due to extreme hardship.

For freshman applicants who do not meet the minimum weighted GPArequirement, they must earn the following SAT or ACT scores in order to be eligible for admission.

If an applicant from a high school outside of the US does not meet the GPArequirement of 3.0, s/he must submit required SAT orACT scores unless it is not possible to take these tests due to extreme hardship.

NOTE: AN APPLICANT WITH A HIGH SCHOOL MINIMUM WEIGHTED GPA BELOW 2.0 MAY NOT BE ADMITTED TO A STATE UNIVERSITY OR UMASS UNDERGRADUATE CAMPUS.

TWO-YEAR STATE COLLEGE ENTRANCE REQUIREMENTS

Most two-year colleges do not have the same requirements as four-year colleges. The following are the common differences between four and two-year college.
Most two-year colleges have:

- Open enrollment – usually any high school graduate can attend
- No SAT/ACT requirements – a placement test (Accuplacer) is given • No foreign language prerequisite
- No specific math requirements, although students are expected to have completed Algebra II

ATHLETIC ELIGIBILITY

Athol High School Eligibility:

In addition to meeting MIAA requirements, Athol High School students must also meet the following minimum academic requirements

- Fall Sports Eligibility: To be eligible for the fall marking period, students are required to earn 80% of their total attempted credits for the prior year. Winter and Spring Sports Eligibility: a student must secure passing grades in 75% of their classes in addition to a designation of Pass in Advisory for the marking period preceding or during participation.

College Eligibility:

Students who wish to compete athletically at the Division I or II level must gain eligibility through the NCAA clearinghouse. Please see your guidance counselor or the athletic director for more information regarding the NCAA clearinghouse or refer to their website: www.eligibilitycenter.org

ADD-DROP PERIOD

The add-drop period is the first 10 days from the start of the course. During this time a student may request a course change to better meet their graduation requirements or interests, if graduation requirements have been met. After the add-drop period there must be a significant extenuating circumstance and administrative approval for students to make a course change.

Any student wishing to drop an AP course after the add-drop period must attend a meeting with their teacher, administrator, parents and/or guardians, and guidance counselor before the change will be approved.

REPORT CARDS & PROGRESS REPORTS

Report cards will be sent home with students four times during the year. Progress reports will be sent home with each student midway through each quarter. Both of these reports are available on the student and parent portals.

ATHOL HIGH SCHOOL ALTERNATIVE PROGRAM

Prerequisite: Requires referral by administration and/or a student's school based team. See your Dean of Students for more information regarding this program.

EARLY COLLEGE ACADEMY AND DUAL ENROLLMENT

Dual enrollment is when a student is enrolled in both Athol High School and a college in order to take college-level courses. Students who meet eligibility requirements may have an opportunity to take college-level courses offered by local colleges, including but not limited to MWCC Mount Wachusett Community College and FSU Fitchburg State University. These courses vary based on interest, instructor availability, and other factors. Courses may take place at Athol High School, or they may be asynchronous (online). Information about these courses will be shared with students and families as it becomes available. These courses are typically available only to juniors and seniors.

Athol High School's Early College Academy is a collaboration between Athol High School, Mount Wachusett Community College (MWCC), and Fitchburg State University (FSU). Students in grades 8-11 can apply to join the program, which gives them access to free dual enrollment/college courses, and extra college and career readiness opportunities. During junior year, students in the program may take 4 or more MWCC college courses, taught by college professors at AHS in the College and Career Readiness Classroom. During senior year, students may take all of their courses at MWCC's Gardner campus. Free transportation and meals are provided. In addition, students have access to multiple courses each semester and over the summer through FSU. All courses are completely free. Students do not need to join Early College Academy to participate in dual enrollment courses. However, there are many more course opportunities for enrolled ECA students.

Recruitment for AHS's Early College Academy takes place each spring between March and May. Information about how to apply will be shared with students and families, and will also be available on the AHS website.

INNOVATION CAREER PATHWAY IN ADVANCED MANUFACTURING & ENGINEERING

Innovation Career Pathways (ICP) give students coursework and work-based learning experience in a specific high-demand industry. Also, participating students get career-specific certifications, knowledge, and skills before they graduate high school. The ICP Innovation Career Pathways program requires that students complete two advanced courses, two credits of technical courses, a 100 (or more) hour internship, and attend the Career Pathways Advisory. Course descriptions can be found in the Science and Technology section of this document. Internships may be paid or unpaid, and are coordinated by the AHS College and Career Readiness Coordinator. Internships are arranged based on students' areas of interest, and include the redesigned L.S. Starrett Company Co-op, Engineering and Tech community partners, and more. Students who complete the program receive a program certificate along with their high school diploma, and a stamp on their high school transcript.

Athol High School is currently designated in two ICP programs: **Advanced Manufacturing and Information**. Within the two programs, we offer three strands:

1. **Advanced Manufacturing & Engineering**
   Introduction to Engineering Design (IED) and Principles of Engineering (POE), followed by Capstone or an Internship.

2. **Information: Technology & Computer Science**
   CP or AP Computer Science Principles (CSP) and Cybersecurity, followed by a Capstone or an Internship

   Or

Cybersecurity and AP Computer Science A (CSA), followed by Capstone or an Internship

3. **Information: Biomedical Science & Biotechnology**
   Biotechnology and Bioinformatics, followed by Capstone or an internship

Any student interested in STEM (Science, Technology, Engineering and Math), Manufacturing, the Building and Construction trades, Computers, Robotics, Programming, etc. is encouraged to join the Advanced Manufacturing/Engineering Career Pathway. Any interested student grades can apply between grade 8 and through the beginning of grade 11. Students may enter the pathway starting as a sophomore.

To complete an Innovation Career Pathway, students must:

- Take two advanced-level courses in their strand
- Earn two credits in technical coursework
- Complete a 100-hour (or more) internship or Capstone Project
- Participate in the Career Pathways Advisory

Course descriptions can be found in the Science and Technology section of this document.

Internships may be paid or unpaid and are coordinated by the AHS College and Career Readiness Coordinator. Placements are based on students' interests and may include the L.S. Starrett Company Co-op, engineering and tech partners, biomedical sites, and other community organizations.

Students who complete all requirements receive:

- A Program Certificate at graduation
- A seal on their high school transcript
- AP coursework and Capstone Projects can also lead to college credit

~~Athol High School's first pathway, which began during the 2023-2024 school year, is Advanced Manufacturing and Engineering. Any student interested in STEM (Science, Technology, Engineering and Math), Manufacturing, the Building and Construction trades, Computers, Robotics, Programming, etc. is encouraged to join the Advanced Manufacturing/Engineering Career Pathway. Any interested student grades can apply between grade 8 and through the beginning of grade 11.~~

~~The ICP Innovation Career Pathways program requires that students complete two advanced courses, two credits of technical courses, a 100 (or more) hour internship, and attend the Career Pathways Advisory. Course descriptions can be found in the Science and Technology section of this document. Internships may be paid or unpaid, and are coordinated by the AHS College and Career Readiness Coordinator. Internships are arranged based on students' areas of interest, and include the redesigned L.S. Starrett Company Co-op, Engineering and Tech community partners, and more. Students who complete the program receive a program certificate along with their high school diploma, and a stamp on their high school transcript.~~

~~AdvanceManufacturing/Engineering~~ Innovation Career Pathway Course Requirement Information

Course Name	Program Category	Credit
Engineering Design I	Advanced OR Technical	2.0
Principles of Engineering (offered 2024-2025)	Advanced OR Technical	1.0

Engineering Capstone	Advanced OR Technical	1.0
Computer Programming 1	Technical	1.0
Honors Computer Programming 2	Technical	1.0
AP Computer Science Principles (CSP) offered odd School Year (SY)	Advanced OR Technical	3.0
AP Computer Science A (offered even SY start)	Advanced OR Technical	3.0
PMI Precision Measurement Instruments *Required for students participating in the Starrett Co-op.	Technical	0.5
Robotics	Technical	0.5
Biotechnology odd SY starts	Advanced or Technical	1.0
Bioinformatics even SY starts	Advanced or Technical	1.0
Any AP or College/dual enrollment course	Advanced	varies

INDEPENDENT STUDY

Independent study opportunities are available for extenuating circumstances. In an independent study the student is responsible for completing course work independently under the supervision of a faculty member. If a student would like to complete an independent study, then they should speak to an administrator, guidance counselor, or faculty member. Once the request is made, the following steps will be followed:

1. The student's request will be routed to the principal.
2. The principal will make an initial determination as to whether or not there is an available instructor who is competent to supervise the student in the particular area of study the student has requested.
3. If such an instructor is available, the student and the instructor will then plan a course of study that will be submitted to the principal for approval before the work can actually begin. This will specifically outline course objectives, course requirements, length of course, grading, etc.
4. Transcripts will reflect this type of program by listing the field of study after the words "Independent Study." Example: Independent Study -American literature.

INTERNSHIP

The School to Career Internship program places students with area businesses/agencies and/or on campus for internships. Students can earn Athol High School academic credit for participating in internships. The following process will be followed for suitable placement.

Student Sign-Up: Interested juniors and seniors need to fill out an application and make an appointment to meet with their guidance counselor or the internship counselor to discuss possible internship placement.

Basic Interview: The student will meet with the internship counselor to discuss and clarify the student's understanding of the requirements, benefits, and goals for participation in the internship program.

Schedule Availability: The student's guidance counselor will check the student's schedule to coordinate necessary courses to meet graduation requirements with potential schedule openings for an internship.

Follow Up Session: Based on identified goals and information from the basic interview, the student and the internship counselor will discuss a specific internship site interview with a potential mentor and finalize plans for placement.

Contract: Upon agreement, the student, the student's parents, the internship counselor and site supervisor mentor will sign a contract which details the job description and requirements for the internship. The credit for the internship will be determined by the guidance department and will be based on the school's academic credit standards.

*Due to many factors such as limited internship sites in the community, the inability to fit an internship into a student's schedule, or inappropriate site matches, not all students who request an internship are guaranteed a placement.

In the event that an internship does not get scheduled for a student on the first application, the student may repeat the placement process for another site.

All students who participate in the placement process will have gained experience in utilizing career planning skills that will be beneficial for future job, college or military interviews and productive career decision-making.

Juniors interested in participating in an internship may be limited in the number of internships they may take in a semester.

MASSACHUSETTS SEAL OF BILITERACY

Athol High School offers the opportunity for students to earn the Massachusetts' State Seal of Biliteracy. It recognizes high school graduates who attain proficiency in two or more languages by high school graduation. The Massachusetts Seal of Biliteracy takes the form of a seal that appears on the transcript and diploma of the graduating senior. This recognition may be presented to colleges and future employers. It is intended to give credit to applicants for the attainment of high-level skills in languages, prepare students with skills that will benefit them in the labor market and global society as well as strengthen and honor the multiple cultures and languages in our community.

The criteria to receive a Seal of Biliteracy are as follows:

- Meet all graduation requirements.
- Achieve proficiency or advanced in ELA MCAS.
- ACCESS scores may be used to satisfy the English language criteria for English Learners if students fulfill the requirements of an Educational Proficiency Plan (for a score between 455 and 472 on the English LanguageArts MCAS). These students must demonstrate English proficiency on ACCESS with an overall score of at least level 4.2 and a composite literacy scores of at least level 3.9
- Achieve a 4 or 5 on Advanced Placement language exam or intermediate high on state approved language proficiency exam or portfolio if language exam is not available. The AP exam is usually administered in the spring of the student's junior year.

To pursue the Seal of Biliteracy, students should contact their guidance counselor, language teacher, or English language director before October 15 of their junior year.

LISTING OF COURSE OFFERINGS

The following table lists the course offerings for the 2025-2026 school years in order to highlight the level, length, and credits. For a complete description of the course please refer to the course descriptions sections. Also, please be advised that not all of these courses will necessarily run next year. Courses will be selected to run based on student course requests and teacher availability.

English Language Arts

Course #	Level	Title	Grades	Length	Credits
011A	CP/H	English 9 A	9	Semester 1	1.0
011B	CP/H	English 9 B	9	Semester 2	1.0
056	CP	Creative Writing	9-12	Quarter	0.5
051	CP	Journalism	9-12	Semester	1.0
021A	CP/H	English 10 A	10	Semester 1	1.0
021B	CP/H	English 10 B	10	Semester 2	1.0
023	AP	English 10: AP Seminar	10	Full Year	3.0
057	CP	Crime as a Genre: Fiction and Nonfiction	9-12	Quarter	0.5
058	CP	Producing Podcasts	9-12	Quarter	0.5
059	CP	Dramatic Arts	9-12	Semester	1.0
060	CP	World Mythology	9-12	Quarter	0.5
063	CP	Youth and the Law	9-12	Quarter	0.5
031	CP	English 11	11	Semester	1.0
043	AP	AP English Literature and Composition	11-12	Full Year	3.0
044	AP	AP English Language and Composition	11-12	Full Year	3.0
045	AP	AP Research	11-12	Full Year	3.0
041	CP	English 12	12	Semester	1.0
064	CP	Film Analysis	9-12	Quarter	0.5

World Language

Course #	Level	Title	Grades	Length	Credits
115	CP	Spanish I	9-12	Semester	1.0
116	CP	Spanish II**	9-12	Semester	1.0
117	Hon	Spanish III	10-12	Semester	1.0

118	Hon	Spanish IV	10-12	Semester	1.0

****assessment required for 9th grade students**

Mathematics

Course #	Level	Title	Grades	Length	Credits
216A	CP/Hon	Algebra IA	9	Semester	1.0
216B	CP/Hon	Algebra IB	9	Semester	1.0
218	CP/Hon	Geometry	9-10	Semester	1.0
200	CP/Hon	Integrated Algebra/Geometry	9-10	Semester	1.0
221	CP/Hon	Algebra II	10-11	Semester	1.0
226H	Hon	Pre-Calculus	10-12	Semester	1.0
228	CP	Probability & Statistics	11-12	Semester	1.0
230	CP	Personal Finance	11-12	Semester	1.0
229VHS	AP	VHS AP Statistics	11-12	Full-Year	3.0
227VHS	AP	VHS AP Calculus AB	11-12	Full-Year	3.0
226AP	AP	Pre-Calculus	11-12	Full-Year	3.0

Science and Technology

Course #	Level	Title	Grades	Length	Credits
311A	CP/H	Intro Biology	9-10	Full-Year	2.0
311	CP/H	Biology	10-12	Semester	1.0
301	CP/H	Biotechnology	10-12	Semester	1.0
302?	CP/H	Bioinformatics (offered even school year start)	10-12	Semester	1.0
323	AP	AP Biology	10**-12	Full-Year	3.0
323VHS	AP	VHS AP Biology	10-12	Full-Year	3.0
329	CP	Environmental Science (offered odd year start)	10-12	Semester	1.0
324	AP	AP Environmental Science	10**-12	Full Year	3.0

~~324VHS~~	~~AP~~	~~VHS AP Environmental Science~~	~~10-12~~	~~Full Year~~	~~3.0~~
325	CP/H	Anatomy and Physiology (offered every odd year start)	11-12	Semester	1.0
324B	CP	Exercise Science: Anatomy, Kinesiology, and Biomechanics (Grades 10-12)	10-12	Semester	1.0
316	CP/H	Chemistry	10-12	Semester	1.0
320	AP	AP Chemistry	NA	NA	NA
320VHS	AP	VHS AP Chemistry	11-12	Full-Year	3.0
314	CP	Geology:Earth Systems & Structures	NA	NA	NA
330	CP/H	Intro Physics	9-10	Full-Year	2.0
341	CP/H	Physics	10-12	Semester	1.0
327	AP	AP Physics 1	11-12	Full-Year	3.0
327VHS	AP	VHS AP Physics 1	11-12	Full-Year	3.0
361A	CP	Engineering and Design 1	10-12	Full-Year	2.0
361B	Hon	Principles of Engineering	10-12	Semester	1.0
360	CP	Precision Measurement Instruments (PMI) 1†	11-12	Quarter	0.5
307	CP	PMI 2/Multimeter Certification†	NA	NA	NA
308	CP	Robotics	10-12	Quarter	0.5
350	CP	Programming 1†	10-12	Semester	1.0
350B	Hon	Programming 2†	10-12	Semester	1.0
328C	CP/H	Computer Science Principles†	10-12	Semester	1.0
328	AP	AP Computer Science Principles (offered odd year start)	11-12	Full Year	3.0
328VHS	AP	VHS AP Computer Science Principles	10-12	Full Year	3.0
326	CP/H	Cybersecurity	10-12	Semester	1.0
370	CP	Artificial Intelligence	11-12	Term	0.5
328A	AP	AP Computer Science A (offered even year start)	11-12	Full Year	3.0
313	Hon	Capstone	11-12	Semester	1.0

309	CP	Forensics 1	10-12	Quarter	0.5
309H	Hon	Forensics 2 (offered every even year start)	11-12	Semester	1.0
~~321~~	~~CP~~	~~Scientific Literacy~~†	~~NA~~	~~NA~~	~~NA~~
~~322~~	~~CP~~	~~Sustainability in the Media~~†	~~NA~~	~~NA~~	~~NA~~
321A	CP	Medical Terminology†	10-12	Quarter	0.5

†Does not count as laboratory science for graduation.
****Life Science Course***

Social Studies

Course #	Level	Title	Grades	Length	Credits
452	CP/H	United States History I	9-10	Semester	1.0
472	AP	AP United States History	10-12	Full-Year	3.0
430	CP	American Government	12	Semester	1.0
453	CP	United States History II	10-12	Semester	1.0
424	CP	Psychology	9-12	Quarter	0.5
424A	Hon	Psychology II Honors	10-12	Quarter	0.5
426	CP	Sociology	10-12	Quarter	0.5
411	CP	World History	11	Semester	1.0
411AP	AP	AP World History	11-12	Full Year	3.0
460	AP	US Government and Politics	11-12	Full Year	3.0

Business

Course #	Level	Title	Grades	Length	Credits
568	Std	Office Productivity 1 (Word/PP)	9-12	Semester	1.0
567	Std	Office Productivity 2 (Excel/Pub)	9-12	Semester	1.0
514	CP	Accounting 1	10-12	Semester	1.0
515	CP	College and Career Skills	11-12	Quarter	0.5

Visual Art

Course #	Level	Title	Grades	Length	Credits
720	Std	Art 1: Visual Arts Foundations	9-12	Semester	1.0
721	CP	Art 2: Advanced Drawing and Painting	9-12	Semester	1.0
724	Std	Ceramics 1	9-12	Quarter	0.5
724B	CP	Ceramics 2	9-12	Quarter	0.5
725	CP	Sculpture	9-12	Quarter	0.5
727	CP	Painting	9-12	Quarter	0.5
723	Hon	Art 3: Portfolio and College Preparation	11-12	Semester	1.0
723B	Hon	Art 4: College Art Portfolio Prep	12	Semester	1.0

Music

Course #	Level	Title	Grades	Length	Credits
713	H	Concert Band	9-12	Full Year	2.0
716	H	Concert Choir	9-12	Full Year	2.0
701	Std	Intro to Guitar	9-12	Quarter	0.5
748	Std	Intro to Music Theory	9-12	Semester	1.0
749	Std	Intro to Music Technology	9-12	Quarter	0.5
750	Std	Music History	9-12	Quarter	0.5
713A	CP	Beginning Band	9-12	Full Year	2.0
715	Std	Introduction to the Theater	9-12	Semester	1.0
715A	Std	Theater 2	9-12	Semester	1.0

Physical Education

Course #	Level	Title	Grades	Length	Credits
928	CP	Health & Physical Education I	9-10	Semester	1.0
929	CP	Health & Physical Education II	10-12	Semester	1.0
930	Std	Movement Skills I	9-12	Term	0.5
931	Std	Movement Skills II	10-12	Term	0.5

932	Std	Movement Skills III	10-12	Term	0.5
933	Std	Movement Skills IV	10-12	Term	0.5

Special Education

Course #	Level	Title	Grades	Length	Credits
091A	Std	Futures Mathematics	9-11	Full Year	2.0
091B	Std	Futures Mathematics	12+	Full Year	2.0
094A	Std	Futures Social Studies	9-11	Semester	1.0
094B	Std	Futures Social Studies	12+	Semester	1.0
092A	Std	Futures English	9-11	Full Year	2.0
092B	Std	Futures English	12+	Full Year	2.0
010	Std	Pre-Vocational Training	9+	Semester	1.0
097A	Std	Functional Living	9-11	Semester	1.0
097B	Std	Functional Living	12+	Semester	1.0
101	Std	Strive	9-12	Full-Year	2.0
***	CP	Inclusion Class – Offered in required core classes based on enrollment	9-12	Full Year	2.0
095	Std	Vocational Training	12+	Semester	1.0

Dual Enrollment/College Courses, Internships

Course #	Level	Title	Grades	Length	Credits
909	CP/H/AP	Online Courses*	9-12	Varies	0.5-3.0
996	CP	Internship*	11-12	Term	0.5
996A	CP	Internship*	11-12	Semester	1.0
996B	CP	Internship*	11-12	Full-Year	2.0-5.0
MWCC 30	AP	MWCC SPC 113. Speech	11-12	Semester	1.5
MWCC 21	AP	MWCC ENG 101. College Writing	11-12	Semester	1.5
MWCC 12	AP	MWCC MAT 143. Statistics	11-12	Semester	1.5
MWCC 28	AP	MWCC SOC 103. Introduction to Sociology	11-12	Semester	1.5

MWCC 44	AP	MWCC PSY 105. Introduction to Psychology	11-12	Semester	1.5

Other Mount Wachusett Community College Courses as made available to our students
Course and internship selection requires approval

COURSE DESCRIPTIONS

ENGLISH

The following English courses are required:

English 9 A and B
English 10 A and B **or** English 10: AP Seminar
English 11 or AP English Literature and Composition or AP English Language and Composition or Dual Enrollment English
English 12 or AP English Literature and Composition or AP English Language and Composition or Dual Enrollment English

Course #	Level	Title	Grades	Length	Credits
011A	CP/H	English 9 A	9	Semester 1	1
011B	CP/H	English 9 B	9	Semester 2	1
This course emphasizes the development of reading, writing, viewing, speaking, and listening skills. It also includes instruction in research and study skills. Students read from various literary genres (novels, short stories, poetry, non-fiction and drama), complete frequent writing exercises, use reference sources, and produce periodic oral presentations. Students will complete a persuasive essay that involves research and documentation. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.					
056	CP	Creative Writing	9-12	Quarter	0.5
This course will involve the study and analysis of personal narrative, memoir, poetry, short story and drama genres. After the reading and analysis of each form, students will compose original pieces which will be performed or published for the class. Students are expected to offer substantial editorial support for one another. The first half of the course is dedicated to learning the fundamentals of writing across genres, while the second half of the course is focused on creating, editing, and publishing work in the AHS literary magazine.					
051	CP	Journalism	9-12	Semester	1.0
Students in this course will learn the history, principles, and ethics of journalism, and they will learn to write in various journalistic formats (news, editorial, sports, review, etcetera). Students will also study and discuss current events and will analyze various aspects of the media. The class is also responsible for the production of an online student newspaper and recording of morning announcements. Students may intern for the paper after completing the course.					
021A	CP	English 10 A	10	Semester 1	1
021B	CP	English 10 B	10	Semester 2	1
Prerequisite: English 9 A and B					

This course focuses on the continued development of the student's reading and writing skills and provides a thematic approach to the study of literature. Students will be expected to write compositions, write book reviews and literary analyses, and continue to develop viewing, speaking, listening and vocabulary skills. Readings will include a variety of fiction– such as novels, short stories, plays, and poetry– as well as nonfiction– such as memoirs, essays, and research.

023	AP	English 10: AP Seminar	10	Full Year	3.0

Prerequisite: English 9 A and English 9 B
AP Exam Required
AP Contract Required

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational, literary, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team.
Note: colleges do not always award AP credit for this course– if they do, it is typically general elective credit; the goal of this course is to prepare students for AP/College coursework in 11th and 12th grades.

045	AP	AP Research	11-12	Full Year	3.0

Prerequisite: AP Seminar (including a passing grade in the class as well as completion of all components of the AP exam)
AP Exam Required
AP Contract Required

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000–5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

Please note: this course does not replace a core requirement; see College Board for more information about the Capstone Diploma Program and how college credits might be awarded.

057	CP	Crime as a Genre: Fiction and Nonfiction	9-12	Quarter	0.5

This course will dig into society's obsession with both mystery fiction and True Crime narrative genres. Students will think critically about potentially harmful biases in True Crime cases, while also analyzing criminal motives and behaviors, and ultimately working to define what justice looks like for victims and their families. Students will identify the elements of a mystery, analyze the narrative point of view of True Crime and Detective stories, research evidence and motives in actual True Crime cases, craft compelling crime narratives of their own, and much more.

058	CP	Producing Podcasts	9-12	Quarter	0.5

This course will offer students the opportunity to explore different genres of podcasts and learn about the process to create them. Over the length of the course students will identify the elements of a podcast, analyze the narrative techniques and text structures used within podcasts, build speaking and listening skills, craft an engaging podcast of their own, and much more.

059	CP	Dramatic Arts	9-12	Semester	1.0

This course will offer students the opportunity to learn about various aspects of theater arts including, but not limited to the following: conventions of theater, acting, theater history, varieties of drama, production guidelines and techniques, and acting

techniques. Several contemporary plays– both comedies and dramas– will be read, analyzed, rehearsed, and performed in the course.

060	CP	World Mythology	9-12	Quarter	0.5

This course will analyze ancient myths to help us understand ourselves as human beings. We will examine myths from Ancient Rome, Egypt and the Middle East, the British Isles, Northern Europe, and North and South America.

063	CP	Youth and the Law	9-12	Quarter	0.5

This course will familiarize students with their rights and protections in the legal system. We will look at freedom of speech, the court system, law enforcement, the field of corrections, and other aspects of the Constitution as it affects students.

031	CP	English 11	11	Semester	1.0

Prerequisite: English 10 A and B or English 10: AP Seminar

This course will continue to build on reading, viewing, speaking, listening and writing skills learned in previous courses, with a particular emphasis on writing. All aspects of writing a research paper will be thoroughly explored, culminating in the production of a fully documented research paper. American literature will provide the basis for most reading and writing assignments. Students will be expected to use higher order thinking skills and demonstrate logical development of ideas.

043	AP	AP English Literature and Composition	11-12	Full Year	3.0

Prerequisite: English 10 A and B or English 10:AP Seminar
Summer assignment and signed AP contract required

Students will experience a college-level curriculum that follows Advanced Placement guidelines in the area of literature and composition. The course will emphasize the in-depth study of canonized literary texts, as well the practice of critical essay writing. Students will be required to take the AP Literature and Composition exam in the spring.

044	AP	AP English Language and Composition	11-12	Full Year	3.0

Prerequisite: English 10 A and B or English 10: AP Seminar
Summer Assignment and signed AP contract Required

Students will experience a college-level curriculum that follows Advanced Placement guidelines in the area of language and composition. The course will emphasize the rhetorical study of a wide array of literary and informational texts, as well the practice of varied writing forms. Students will be required to take the AP Language and Composition exam in the spring.

041	CP	English 12	12	Semester	1.0

Prerequisite: English 11 or AP Language and Composition or AP Literature and Composition

This course is designed to reinforce and refine English language arts skills already learned in English 11. Writing will include autobiographical essays, critical reactions for a variety of purposes, creative writings and research-based projects. Quality in terms of content, organization, and mechanics will be expected.

Vocabulary development and speaking skills will be addressed. World literature will provide the basis for reading selections. Readings will be discussed with the purpose of encouraging students to reach more sophisticated critical judgments.

064	CP	Film Analysis	9-12	Quarter	0.5

The Film Analysis course will cover an introduction into the world of filmmaking. Students will analyze the filmmaker's choices in creating their film such as script development, casting, set, costume, and editing. Each student will be responsible for researching and writing a paper about a filmmaker of their choosing.

WORLD LANGUAGES

Course #	Level	Title	Grades	Length	Credits
115	CP	Spanish I	9-12	Semester	1.0

Students will be introduced to the culture that is called the Hispanic world. Emphasis will be placed on achieving significant progress in the four major areas of language acquisition; reading, writing, listening, and speaking. Students will master basic communication techniques on the beginning level of the language, with the goal of continuing their studies to the highest level offered. Incoming students may bypass Spanish I directly into Spanish II with the successful completion of the Spanish II Acceleration Assessment Exam.

116	CP	Spanish II	9-12	Semester	1.0

Prerequisite: Spanish I or assessment for grade 9 students

Students will strengthen communication skills through more complex exercises in listening comprehension and oral expression. Writing exercises, cultural readings, and grammar study will be constant throughout this course. Incoming students may bypass Spanish I directly into Spanish II with the successful completion of the Spanish II Acceleration Assessment Exam

117	Hon	Spanish III	10-12	Semester	1.0

Prerequisite: Spanish II

Students will complete their study of all Indicative verb tenses, with the goal of entering into the realm of the Subjunctive, and poetry will be used as an instructional vehicle for verb mastery. All basic grammatical structures and vocabulary will also be covered. Students will be expected to memorize substantial amounts of material and be capable of recollecting said material in the skills of reading, writing, speaking and listening.

118	Hon	Spanish IV	10-12	Semester	1.0

Prerequisite: Spanish III

This course rewards students who have successfully completed the pre-requisites because its focus is not grammatical but socio-political and literary. Although the subjunctive may be addressed in a remedial manner, prior grammatical knowledge and communicative skills will be utilized to explore specific topics of the Hispanic experience in the United States.

MATHEMATICS

Course #	Level	Title	Grades	Length	Credits
216A	CP/Hon	Algebra IA	9	Semester	1.0
This course is the first of two algebra courses designed to help the student have a better understanding of the nature of mathematical systems. Fundamental and advanced properties of number patterns, operations with real numbers, properties of numbers, order of operations, first-degree equations and inequalities, linear and quadratic functions, factoring, graphing, solving word problems, exponents, probability and statistics, systems of equations and polynomials will be explored. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.					
216B	CP/Hon	Algebra IB	9	Semester	1.0
This course is the second of two algebra courses designed to help the student have a better understanding of the nature of mathematical systems. Fundamental and advanced properties of number patterns, operations with real numbers, properties of numbers, order of operations, first-degree equations and inequalities, linear and quadratic functions, factoring, graphing, solving word problems, exponents, probability and statistics, systems of equations and polynomials will be explored. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.					
218	CP/Hon	Geometry	9-10	Semester	1.0
Prerequisite: Completion ofAlgebra I at AHS or ARMS. This course in geometry is designed to help the student have a better understanding of the nature of mathematical systems and an appreciation of the basic structure of geometry. Fundamental and advanced properties of plane, analytic and solid geometry are introduced. Strong emphasis is placed on definitions, basic postulates and theorems and the use of deductive reasoning. Algebra is used as a tool to help understand and develop geometric concepts. Students will also be introduced to such topics as coordinate geometry, trigonometry and transformations. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.					
200	CP/Hon	Integrated Algebra/Geometry	9-10	Semester	1.0
This course in Integrated Algebra and Geometry is designed to finish the last two sections of the Geometry course and build upon the skills learned in Algebra I as well as cover all pertinent topics in preparation for the MCAS test. Strong emphasis is placed on definitions, basic postulates and theorems and the use of deductive reasoning. Algebra is used as a tool to help understand and develop geometric concepts. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.					
221	CP/Hon	Algebra II	10-11	Semester	1.0
Prerequisite: Geometry This course in algebra is designed to help the student have a better understanding of the nature of mathematical systems. It is designed to build upon the concepts learned in Algebra I and to help students understand algebra as a study of the real and complex number systems. Furthermore, the concept of functions as they relate to mathematics is a main theme for the study of algebra and a clear understanding of this concept is a primary goal. Topics include matrices, probability and statistics, linear, quadratic, logarithmic and trigonometric functions, as well as the introduction of conic sections and					

sequences and series. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.

226H	Hon	Pre-Calculus	10-12	Semester	1.0

This is a college preparatory course designed for the college-bound student. The topics covered in this course will include numbers systems, functions, trigonometry, sequences, series, limits, algebraic functions, exponential and logarithmic functions, vectors, systems of linear equations, and conic sections. The TI-83, TI-84, or TI-89 graphing calculator will be used extensively in this course. Students are encouraged to obtain one of these calculators, however the school will have a limited number of TI-83 graphing calculators available for student use.

228	CP	Probability & Statistics	11-12	Semester	1.0

Prerequisite: Algebra II

This introductory course is designed for the college-bound student with a strong interest in probability and statistics. Topics covered in the course include the normal distribution, scatter plots, correlation, least squares regression, designing experiments, probability, control charts, binomial distributions, test of significance, and confidence intervals. All students in this course will be eligible to receive honors credit. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.

230	CP	Personal Finance	11-12	Semester	1.0

Understanding and managing personal finances are key to one's future financial success. Personal Finance presents essential knowledge and skills to help students prepare to begin making their own financial decisions as they move on to college, getting a job right after high school, or moving out to live on their own.
This course connects practical mathematical concepts to personal and real world experiences including: calculating gross and net pay and payroll taxes, budgeting, maintaining a checking account, calculating interest on credit cards and loans, and other real world concepts.

In order to prepare students for the workplace, they will be led through a step-by-step process of filling out a job application, I-9, and a W-4. Also covered is an analysis of the interviewing process that will prepare them for any job interview!–The class will also explore the increasingly important subject of identity theft and how it relates to personal financial management. Studying these topics can prevent them from making bad financial decisions that can result in debt and poor spending habits.

The unit on money management teaches about the benefits of savings and checking accounts as well as the various types of banking institutions. Students will also learn about the cost of credit and debt, the importance of establishing good credit, and how to manage their credit properly.

229VHS	AP	VHS AP Statistics	11-12	Full-Year	3.0

Prerequisite: Algebra II
Signed AP contract required

This advanced course is designed for the college-bound student with a strong interest in probability and statistics. Topics covered in the course include the normal distribution, scatter plots, correlation, samples and experiments, probability,

binomial and geometric distributions, test of significance, confidence intervals, Chi-square, and analysis of variance. Students who enroll in this course are required to take the AP Statistics Exam. No final exam is given for this course. However, all students are required to take the Advanced Placement Statistics exam in May.

227VHS	AP	VHS AP Calculus AB	12	Full-Year	3.0

Prerequisite: PreCalculus
Signed AP contract required

This advanced course is designed for the college-bound student with a strong interest and ability in mathematics. The focus of the course will be on the topics of limits, derivatives and integration. No final exam is given for the course. However, all students are required to take the Advanced Placement Calculus exam in May.

	AP	AP Pre Calculus	11-12	Full-Year	3.0

Prerequisite: Algebra II
Signed AP contract required

This is a college preparatory course designed for the college-bound student. The topics covered in this course will include numbers systems, functions, trigonometry, sequences, series, limits, algebraic functions, exponential and logarithmic functions, vectors, systems of linear equations, and conic sections. The TI-83, TI-84, or TI-89 graphing calculator will be used extensively in this course. Students are encouraged to obtain one of these calculators, however the school will have a limited number of TI-83 graphing calculators available for student use. No final exam is given for the course. However, all students are required to take the Advanced Placement Calculus exam in May.

SCIENCE & TECHNOLOGY

Course #	Level	Title	Grades	Length	Credits
311A	CP/H	Intro Biology	9-10	Full-Year	2.0
This year-long course is specifically designed for students in preparation for the June biology MCAS exam. The course will rely heavily on laboratory experiences. This course will follow the learning standards set up by the Massachusetts Department of Elementary and Secondary Education. Topics include: 1) The chemistry of life 2) Structure and function of cells 3) Genetics 4) Human anatomy and physiology 5) Evolution and biodiversity 6) Ecology and 7) Experimental design. *All students taking this course are expected to take the Biology MCAS exam.* To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed ***Life Science**					
311	CP/H	Biology	10-12	Semester	1.0
The course will rely heavily on laboratory experiences. This course will follow the learning standards set up by the Massachusetts Department of Elementary and Secondary Education. Topics include: 1) The chemistry of life 2) Structure and function of cells 3) Genetics 4) Human anatomy and physiology 5) Evolution and biodiversity 6) Ecology and 7) Experimental design. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed. *Life Science					
301	CP/H	Biotechnology	10-12	Semester	1.0
This hands-on, lab-based class explores the basics of biotechnology with emphasis on central dogma of biology, DNA techniques, career applications in biotech, and bioethics. Throughout the semester, you will gain experience in various laboratory techniques, such as PCR, electrophoresis, bacterial transformation, lab math, and recording your experiments. This course includes extensive lab work and critical thinking. ***Life Science**					
302	CP/H	Bioinformatics	10-12	Semester	1.0
This course is designed to give students both a theoretical background and a working knowledge of the techniques employed in bioinformatics. Emphasis will be placed on biological sequence (DNA, RNA, protein) analysis and its applications. It is an introduction to the basic bioinformatics tools used in computational biology for life science research. The course will use web-based resources that analyze gene and protein sequences as pertinent data examples.					
323	AP	AP Biology	10**-12	Full-Year	3.0
Signed AP Contract required In this course, students will explore four big ideas: (1) Evolution: The process of evolution drives the diversity and unity of life, (2) Energetics: Biological systems use energy and molecular building blocks to grow, reproduce, and maintain dynamic homeostasis, (3) Information Storage and Transmission: Living systems store, retrieve, transmit, and respond to information essential to life process, and (4) Systems Interactions: Biological systems interact, and these systems and their interactions exhibit complex properties. Students will cultivate their understanding of biology through inquiry-based investigations as they explore topics in cell structure, function and communication, biochemistry, genetics, ecology, and interactions between systems. ***Life Science** **Open to 10th graders designated in the Early College Academy pathway.					
323VHS	AP	VHS AP Biology	10-12	Full-Year	3.0

Signed AP Contract required

In this course, students will explore four big ideas: (1) Evolution: The process of evolution drives the diversity and unity of life, (2) Energetics: Biological systems use energy and molecular building blocks to grow, reproduce, and maintain dynamic homeostasis, (3) Information Storage and Transmission: Living systems store, retrieve, transmit, and respond to information essential to life process, and (4) Systems Interactions: Biological systems interact, and these systems and their interactions exhibit complex properties. Students will cultivate their understanding of biology through inquiry-based investigations as they explore topics in cell structure, function and communication, biochemistry, genetics, ecology, and interactions between systems.
***Life Science**

329	CP	Environmental Science	10-12	Semester	1.0

This lab intensive course focuses on understanding the interactions between organisms and both the living and nonliving components of their environment. By studying ecology we will gain a greater understanding and appreciation of our natural world. Ecology will involve laboratory experiences where we will have the opportunity to measure and gather information about organisms and their environment. Topics in ecology will include: (1) Human influences on the environment (2) Terrestrial and aquatic ecosystems (3) Populations (4) Species Interactions and (5) Biodiversity. This entire course will involve laboratory experiences where we will have the opportunity to measure and gather information about organisms and their environment. **As this is an environmental science, students are expected to be able to perform laboratory/fieldwork outside on campus. Dressing appropriately for outdoor conditions is mandatory.**
***Life Science**

324	AP	AP Environmental Science	NA	NA	NA

Signed AP contract required

AP Environmental Science is designed to be both rigorous and demanding. The College Board states that: *"The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography."* Topics in the course will include land and water use, energy resources and consumption, pollution, population studies, and global climate change. Students will be expected to take theAP exam given by The College Board. **As this is an *environmental* science, students are expected to be able to perform laboratory/fieldwork outside on campus. Dressing appropriately for outdoor conditions is mandatory.** Summer work will be required.
***Life Science**

324VHS	AP	VHS AP Environmental Science	10-12	Full Year	3.0

Signed AP contract required

This virtual high school AP Environmental Science course is designed to be both rigorous and demanding. The College Board states that: *"The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography."* Topics in the course will include land and water use, energy resources and consumption, pollution,

population studies, and global climate change. Students will be expected to take theAP exam given by The College Board.
*Life Science

325	Hon	Anatomy and Physiology	11-12	Semester	1.0

Recommended prior coursework: Biology, Chemistry
A challenging full year course focused on the study of the human body. Topics will include: 1) Basic organization of the human body from cell to physiological system 2) Basic chemistry and biochemistry as it relates to the human body 3) Morphology and physiology of each of the eleven body systems and the role of each system in maintaining homeostasis and 4) How disease affects the human body. This course will offer laboratory experiences including a fetal pig and a cat dissection. Students who are interested should have a strong background and interest in biology. Summer work **may** be required.
*Life Science

316	CP/H	Chemistry	10-12	Semester	1.0

This challenging college preparatory class is designed to focus on the building of science and math skills necessary to succeed at the college level. Taking chemistry in college is necessary if you want to go into many fields including those of health and engineering, environmental and earth science, as well as any of the traditional science fields of chemistry, biology and physics. Nursing, physical therapy, as well as being a technician or a doctor are all fields that require a strong background in chemistry. For this reason, chemistry is considered a "gateway class." Completing a course in high school chemistry greatly improves your chances of success in science courses you will take in college. This college preparatory level class covers the structure composition and interaction of matter, atomic theory, stoichiometry, and phase changes, intermolecular forces, gas laws, and solution chemistry. This lab course will utilize laboratory exercises to support, augment and emphasize course topics. A comfortable working knowledge of basic algebra is necessary for problem solving. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.
*Physical Science

320	AP	AP Chemistry	NA	NA	NA

Signed AP contract required

AP Chemistry is designed to be identical to a first year freshman course in college. AP Chemistry is a demanding in-depth continuation of the college preparatory chemistry class. Topics covered in the course will include: stoichiometry, aqueous and solution chemistry, thermochemistry and chemical thermodynamics, bonding principals, gas laws, acids and bases, kinetics, equilibrium reactions, electrochemistry and organic chemistry. Students will be expected to take the AP exam given by the College Board in May. If successfully passed, the exam can be used for college credit.
*Physical Science

320VHS	AP	VHS AP Chemistry	11-12	Full-Year	3.0

Signed AP contract required

This virtual high school AP Chemistry course is designed to be identical to a first year freshman course in college. AP Chemistry is a demanding in-depth continuation of the college preparatory chemistry class. Topics covered in the course will include: stoichiometry, aqueous and solution chemistry, thermochemistry and chemical thermodynamics, bonding principals, gas laws, acids and bases, kinetics, equilibrium reactions, electrochemistry and organic chemistry. Students will be expected to take the AP exam given by the College Board in May. If successfully passed, the exam can be used for college credit.

*Physical Science

314	CP	Geology:Earth Systems & Structures	NA	NA	NA

Geology is an applied science course based on the principles of physics, chemistry and biology. This course is designed for the student who is interested in learning about how the earth became the planet it is today. Specific unit topics include: (1) Minerals and rocks (2) The rock cycle (3) Earthquakes and volcanoes (4) Weathering and erosion and (5) Geologic time and maps.
*Physical Science

330	CP/H	Intro Physics	9-10	Full-Year	2.0

This introductory physical science course examines the physical world around us. Through a variety of experiences students will develop their understanding of the structure, properties, and reactions of matter; forces and motion; and the relationships between matter and energy. Students will build their understanding of the physical sciences through hands-on exploration of the physical world. The physical science course will lay the foundation for further study in the physical, earth, and life sciences. In this course participants will strengthen their math skills and they will apply math skills in the solution of basic physical science problems. Students taking this course will be on track to take the MCAS in physics for their science graduation requirement. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed. *All students taking this course are expected to take the Physics MCAS exam.*
*Physical Science

341	CP/H	Physics	10-12	Semester	1.0

Corequisite: Algebra 1

This challenging college preparatory class is designed to focus on the building of science and math skills necessary to succeed at the college level. The course deals with the general subject area of Newtonian mechanics. Individual topics will include kinematics, Newton's Laws of Motion, energy, power, linear momentum, circular motion, gravity and kinetic theory. Laboratory experiences and problem solving will be used to gain an in-depth understanding of important concepts. To earn honors designation students will complete additional assignments that increase the depth of understanding of the topics listed.
*Physical Science

327	AP	AP Physics 1	NA	NA	NA

Corequisite: Algebra 1
Signed AP contract required
AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. Summer work may be required.
*Physical Science

327VHS	AP	VHS AP Physics 1	11-12	Full-Year	3.0

Prerequisite: Algebra 1
Signed AP contract required

This virtual high school AP Physics 1 course is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, and waves. Summer work may be required.
*Physical Science

361A	CP	Engineering and Design	10-12	Full-Year	2.0

Students explore engineering tools and apply a common approach to the solution of engineering problems, an engineering design process. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students progress from completing structured activities to solving open-ended projects and problems that require them to plan, document, communicate, and develop other professional skills. Through both individual and collaborative team activities, projects, and problems, students apply systems thinking and consider various aspects of engineering design including material selection, human-centered design, manufacturability, assemblability and sustainability. Students develop skills in technical representation and documentation especially through 3D computer modeling using a Computer Aided Design (CAD) application. As part of the design process, students produce precise 3D-printed engineering prototypes using an additive manufacturing process. Student-developed testing protocols drive decision-making and iterative design improvements. To inform design and problem solutions, students apply computational methods to inform design by developing algorithms, performing statistical analyses, and developing mathematical models. Students build competency in professional engineering practices including project management, peer review, and environmental impact analysis as part of a collaborative design team. Ethical issues related to professional practice and product development are also presented.

*Tech/Engineering

361B	Hon	Principles of Engineering	10-12	Semester	1.0

Prerequisites: Engineering 1, Algebra 1

Students explore engineering tools and apply a common approach to the solution of engineering problems, an engineering design process. Utilizing the activity-project-problem-based (APB) teaching and learning pedagogy, students progress from completing structured activities to solving open-ended projects and problems that require them to plan, document, communicate, and develop other professional skills. Through both individual and collaborative team activities, projects, and problems, students apply systems thinking and consider various aspects of engineering design including material selection, human-centered design, manufacturability, assemblability and sustainability. Students develop skills in technical representation and documentation especially through 3D computer modeling using a Computer Aided Design (CAD) application. As part of the design process, students produce precise 3D-printed engineering prototypes using an additive manufacturing process. Student-developed testing protocols drive decision-making and iterative design improvements. To inform design and problem solutions, students apply computational methods to inform design by developing algorithms, performing statistical analyses, and developing mathematical models. Students build competency in professional engineering practices including project management, peer review, and environmental impact analysis as part of a collaborative design team. Ethical issues related to professional practice and product development are also presented

*Tech/Engineering

360	CP	Precision Measurement Instruments (PMI) 1†	11-12	Quarter	0.5

This course is designed to assist multiple technical training disciplines with the proper operation, calibration, and measuring techniques required for utilizing precision measurement equipment effectively. Both SAE and metric measuring instruments will be covered; including steel rules, feeler gauges, precision straight edge, calipers, inside and outside micrometers, angle measurement, small hole gauges, telescoping gauges and dial indicators. This course informs students about future career choices in manufacturing, engineering and other programs.

*Tech/Engineering

†*This course does not count as laboratory science for graduation.*

307	CP	PMI 2/Multimeter Certification†	NA	NA	NA

Prerequisites: PMI 1

This course is designed to assist multiple technical training disciplines with the proper operation, calibration, and measuring techniques required for utilizing precision measurement equipment effectively. Both SAE and metric measuring instruments will be covered; including **steel** rules, feeler gauges, precision straight edge, calipers, inside and outside micrometers, angle measurement, small hole gauges, telescoping gauges and dial indicators. The multimeter certification

has been designed to expertly train students on the functionality, operations, and troubleshooting of electrical systems and circuitry including resistance, continuity, voltage, within a manufacturing setting.
*Tech/Engineering
†*This course does not count as laboratory science for graduation.*

308	CP	Robotics	10-12	Quarter	0.5

This course introduces students to the foundations of robotics with easy to assemble and modify rovers that emphasize real-world applications. Working collaboratively using the Engineering Design Process, students build and program advanced robots to tackle impressive challenges. As they explore mechanical engineering, electrical engineering, and programming, students also analyze the robot's physics, mathematical and scientific elements. The curriculum encourages collaborative problem-solving and the open-source Arduino® C++ programming language fosters creativity.
*Tech/Engineering

350	CP	Programming 1†	10-12	Semester	1.0

Corequisite: Algebra II

This programming class is an introduction to software engineering using the Java and HTML / CSS programming language. In this class students will use computational approaches to real world problem solving. Topics include Data and Society, Cybersecurity, Algorithms, Block- and text-based coding, and conditional loops. Algebra II must be in place because software engineering requires both mathematical and logical aptitude.
*Computer Science
†*This course does not count as laboratory science for graduation.*

350B	Hon	Programming 2†	10-12	Semester	1.0

Prerequisites: Programming 1
Continuing with computer science principles from Programming 1, this extension course includes an overview of occupational-focused coding and computing skills in addition to Python and GCC programming languages (G-Code). Topics include the study of planning, integration, and implementation of automation, along with advanced programming concepts such as arrays, conditions and logic, and object-oriented programming. Students engage in a variety of technical and evaluative writing. Topics include: IT in the Workplace; Computing Systems; Python Programming: sequence, selection, iteration, subroutines, strings & lists, dictionaries and data files; Algorithms: searching and sorting; Data Representation; Impacts of Technology; Computer Networks & Network Security; Databases and SQL; HTML & Occupational-Oriented Programming.
*Computer Science
†*This course does not count as laboratory science for graduation.*

328C	CP/H	Computer Science Principles†	10-12	Semester	1.0

In this course, students will become familiar with the concepts and tools of computer science as they learn a subset of the Java programming language. They will do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. Students will also design a program, develop the algorithms it needs, and write code to implement them. Testing program code and correcting errors will be a primary skill taught in the course. Students will document and explain how program code works.
*Computer Science

328	AP	AP Computer Science Principles	11-12	Full Year	3.0

Signed AP Contract required

In this course, students will become familiar with the concepts and tools of computer science as they learn a subset of the Java programming language. They will do hands-on work to design, write, and test computer programs that solve problems or accomplish tasks. Students will also design a program, develop the algorithms it needs, and write code to implement them. Testing

program code and correcting errors will be a primary skill taught in the course. Students will document and explain how program code works.
*Computer Science

328VHS	AP	VHS AP Computer Science Principles	10-12	Full Year	3.0

Signed AP Contract required

This virtual high school AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Summer work may be required.
*Computer Science

326	CP/ H	Cybersecurity	10-12	Semester	1.0

Cybersecurity will introduce students to networking and cybersecurity fundamentals. Students will learn to design, implement, maintain, and troubleshoot the security posture of wired and wireless network systems.
*Computer Science

328A	AP	AP Computer Science A	11-12	Full-Year	3.0

Prerequisite: Algebra 1
Signed AP Contract Required
AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures in the Java programming language.
*Computer Science

313	Hon	Capstone	11-12	Semester	1.0

Prerequisite: Any 4 science credits

Students engage in an open-ended research experience in the PLTW Capstone course, a culminating program for those completing PLTW's high school offerings. They collaborate in teams, designing and developing original solutions to well-defined and justified real-world problems.
*Tech/Engineering

309	CP	Forensics 1	10-12	Quarter	0.5

Forensic Science is the application of science to the criminal and civil laws that are enforced by police agencies in a criminal justice system. This is a course rich in exploration and lab investigation, which applies many disciplines of scientific study, such as biology/anatomy, chemistry, and physics, to solving crimes. It includes the investigation of fingerprinting, fiber analysis, ballistics, arson, trace evidence analysis, poisons, drugs, blood spatters, and blood samples. Students are taught the proper collection, preservation, and laboratory analysis of various samples. Students will learn to observe, collect, analyze, and evaluate evidence associated with criminal cases. Through scientific reasoning and critical thinking, students will evaluate the use of scientific principles as they apply to criminalistics and other life situations.
*Life Science

309H	Hon	Forensics 2	11-12	Semester	1.0

Prerequisites: Forensics 1

Forensics 2 is an in depth application of science where students focus on the human body as evidence. This course is designed to help students take a hands-on approach to see if they might like working in Forensic Investigation. Students will explore several topics such as toxicology, forensic anthropology, entomology, death investigation and autopsies. This course is designed for those who are more curious about the field of Forensics and want to know more about the investigative side.
*Life Science

321	CP	Scientific Literacy†	NA	NA	NA

This hands-on, lab-based course emphasizes the scientific experimentation process and the subject-specific nature of language and literacy as part of the scientific method. Students will identify and construct questions, generate hypotheses, plan and implement experiments, and record and analyze data. Students will be communicating information and ideas using the language conventions of the scientific community. Students will read, view, write, speak about and listen to science in a variety of formats to allow students' to access new scientific content and to develop their scientific knowledge, understandings, and critical thinking skills.

†*This course does not count as laboratory science for graduation*

322	CP	Sustainability in the Media†	NA	NA	NA

This course engages students in a dynamic and constructivist process of learning how sustainability has been presented in the media with a particular focus on issues related to food, water and agriculture. Each lesson integrates media literacy, digital literacy, and scientific literacy, as well as critical thinking with a content focus on a particular aspect of sustainability. Themes throughout the course include social justice, climate change, energy, economics and unintended consequences of human behaviors and technological advances. The subject areas covered include environmental science, agronomy, anthropology, sociology, economics, journalism and the creative arts among many others.

†*This course does not count as laboratory science for graduation*

321A	CP	Medical Terminology	10-12	Quarter	0.5

This course develops a student's understanding and use of medical terminology. It covers spelling, pronunciation, and abbreviations; the analysis of words based on their root, prefix, and suffix; the identification and description of the major functions and structures of body systems; and the identification of common mistakes in medical terminology. Students will recognize, define, and spell terms related to the pathology and treatment of body systems, and they will analyze and apply knowledge to real-life scenarios.
*Life Science

324B	CP	Exercise Science: Anatomy, Kinesiology, and Biomechanics	10-12	Semester	1.0

In this hands-on course, students explore how the human body moves and how to help it move better. We'll study anatomy (muscles, bones, joints), kinesiology (how the body produces movement), and biomechanics (the physics of movement) to understand performance, injury prevention, and healthy living. Students connect science to real-life activities like sports, dance, fitness, and everyday movement.
*Life Science

370	CP	AI (Artificial Intelligence)	11-12	Term	0.5

This course introduces students to the dynamic and rapidly evolving field of artificial intelligence (AI). Through hands-on projects, ethical discussions, and real-world applications, students will investigate how machines learn, how AI influences society, and how to design simple intelligent systems of their own.

SOCIAL STUDIES

The following classes are required:

- US History I
- US History II
- World History
- US Government
- ***AP US History can replace both US History I & II
- ***AP World History and AP Government can replace their CP counterparts

Course #	Level	Title	Grades	Length	Credits
452	CP/H	United States History I	9	Semester	1.0
Students begin their study of United States history with a review of the origins and main events of the American Revolution, Constitutional principles, and events of the early Republic. They examine the causes and consequences of the Civil War, industrialization, immigration, Progressivism and the role of the United States in World War I. They explore guiding questions such as "What are some examples of continuity and change in the first 150 years of United States history?"					
472	AP	AP United States History	10-12	Full-Year	3.0
Prerequisite: US History I **Signed AP contract required** This course covers the whole of US history with a primary focus on the 20th century. Summer work is required. During the year students will be expected to do a significant amount of reading, writing and independent research. All students are required to take the Advanced Placement US History Exam in May.					
453	CP	United States History II	10	Semester	1.0
Prerequisite: United States History I Students continue their study of United States history of the 20th and 21st centuries. They learn about the economic history of the Great Depression, New Deal, World War II, and the Cold War, concluding with an examination of domestic and global policies and politics in the 21st century. Students explore guiding questions such as, "How has the United States government responded to economic crises?" and "What are the sources of political and cultural differences in the modern United States?"					

411	CP	World History	11	Semester	1.0

Prerequisite: United States History I, & United States History II

In World History students study global events starting in ~1000 CE and going up to the present. Students will examine how the modern world has been shaped by the past, how nations and empires are born, rise, interact, and sometimes fall. The standards introduce students to concepts such as colonialism, imperialism, genocide, human rights, and globalization, and the importance of ethical, political, economic, and scientific ideas in shaping nations.

411AP	AP	AP World History	11-12	Full Year	3.0

Prerequisite: United States History I, & United States History II

AP contract required

In AP World History students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

430	CP	United States Government	11-12	Semester	1.0

Prerequisite: United States History I,United States History II, & World History

Students revisit the Founding Documents of the United States and Massachusetts with an emphasis on understanding their relevance and impact on policies and politics in the present. They study these topics by exploring and researching guiding questions such as “What does it mean to be an informed citizen?” and “How involved should the United States government be in world affairs?” This required course for seniors will also embed their civic action project, per state requirements.

460	AP	United States Government and Politics	11-12	Full Year	3.0

Prerequisite: United States History I, United States History II, & World History

AP Contract Required

AP U.S. Government and Politics provides a college-level, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

424	CP	Psychology	9-12	Quarter	0.5

This is an introductory course in psychology, which is the study of human behavior and mental processing. Topics covered include personality, motivation, learning, intelligence, mental disorders, treatment, and human development. Psychology is a valuable course for all the major career areas and for gaining a better understanding of life skills.					
424A	Hon	Psychology II Honors	10-12	Quarter	0.5
Psychology II Honors will run concurrently with the Psychology course, offering self-sufficient and inquisitive students an opportunity to expand their knowledge of Psychology and analyze tangible, real-world applications. During class time, students will use reading materials to learn more about the biological basis of Psychology in a semi-independent, guided manner. For each of the six units, students will choose at least one independent project to complete. Most projects require reading multiple sources and developing solutions for real-world issues relevant to the corresponding topic in Psychology.					
426	CP	Sociology	10-12	Quarter	0.5
Sociology is the study of social life, social change, and the social causes and consequences of social behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to the hostile mob; from organized crime to religious cults; from the divisions of race, gender and social class to the shared beliefs of a common culture; and from the sociology of work to the sociology of sports. In fact, few fields have such broad scope and relevance for research, theory, and application of knowledge.					

BUSINESS

Course #	Level	Title	Grades	Length	Credits
568	Std	Office Productivity 1 (Word/PP)	9-12	Semester	1.0
It is important that students prepare for life-long learning of computer concepts and skills. This "hands-on" course emulates a work environment where students will enhance their employability skills by creating professional-quality documents, worksheets, and presentations suitable for coursework, professional and personal use. Word processing software will be used to produce, edit and format professional documents while incorporating tables, charts, graphics, templates, and numerous formatting features into their documents. Presentation software will be used to guide students through the process of creating effective, engaging, and dynamic presentations. Students will learn how to create and edit presentations, format text and print their presentations. Students will also learn to enhance and clarify their presentations by adding graphic effects, such as WordArt,AutoShapes and ClipArt. In addition, adding transition and animation effects will be taught in order to create more interesting and informative presentations.					

567	Std	Office Productivity 2 (Excel/Pub)	9-12	Semester	1.0
It is important that students prepare for life-long learning of computer concepts and skills. This "hands-on" course emulates a work environment where students will enhance their employability skills by creating professional-quality documents, worksheets, and presentations suitable for coursework, professional and personal use. In this course, students will learn to use Excel and Publisher. This includes fundamental skills and concepts necessary to create and work with spreadsheets. At the completion of this course, students will have the necessary skills to create, edit, and format data, use formulas, and print a basic worksheet. Topics include formula construction, calculating with functions, searching worksheet data, enhancing worksheets with borders and shading, applying styles, managing workbooks, and printing workbook contents.					
514	CP	Accounting 1	10-12	Semester	1.0
Does your future include a degree in business, finance, marketing, management, or even cosmetology? Would you like to own your own business someday? If you answer yes to any of these questions, an accounting course will likely be required and necessary. This course covers activities related to the accounting cycle of a proprietorship, partnership, and corporation. Students will prepare balance sheets, record journal entries, post to ledgers and perform other accounting procedures that will serve as a background for employment in office jobs and preparation for studying accounting in college. Toward the end of the semester, students will be introduced to an automated accounting system to perform accounting procedures.					
515	CP	College and Career Skills	11-12	Quarter	0.5
In this term-long class, students will learn about a variety of post-secondary options and the skills required to succeed in each. Through research and exploration, field trips, guest speakers, and tasks that foster deeper levels of thinking and reasoning. This course focuses on developing the habits and skills that are expected in college and the workforce, with students practicing universal skills related to post-secondary success (interviewing, workplace conduct, cover letter and resume building, and effective communication) .High school students will develop personal, interpersonal, and cognitive skills that are essential to productivity in the collegiate, vocational, and business worlds.					

VISUAL ARTS

Art classes challenge students to build artistic literacy and engage in artistic practice. In art classes students become critical and creative thinkers, engage in problem-solving, collaboration, and self-expression. Students create original work aligned to the artist's intent, present artistic works to others, respond to the structure and context of artistic works, and make connections about the impact of the arts on oneself, history, and culture.

Course #	Level	Title	Grades	Length	Credits
720	CP	Art 1: Visual Arts Foundations	9-12	Semester	1.0
This introductory visual arts course will provide students with an opportunity to refine and complete artistic work in both two-dimensional and three-dimensional visual arts. Foundational drawing, painting, printmaking, sculpture, mixed media, photography and graphic design projects will be . Both traditional and contemporary art practices will be informed by art history from a wide variety of cultures and time periods. Presentation and exhibition of artwork is an important part of connecting to others and expressing yourself in a visual language.					
721	CP	Art 2: Advanced Drawing and Painting	9-12	Semester	1.0

Prerequisite: Art I

In Art II students develop their art work through the further exploration of both traditional and contemporary art practices as they relate to drawing and painting. This course is designed to advance skills learned in Art I and to further knowledge of working with graphite, colored pencil, charcoal, ink, pastels, markers, watercolor and acrylic paint. Observational and conceptual abilities are further strengthened and developed. Students will learn how to perceive and analyze artistic work exploring art movements, art styles and art history in context to the work they create. Collaborative critique and presentation of artwork will promote further artistic growth.

723	HON	Art 3: Independent Art Project	10-12	Semester	1.0

Prerequisite: Art 1, Art 2 and teacher recommendation

Art III is for advanced art students who demonstrate the ability to work both independently and collaboratively in the art studio. Students demonstrate a high level of self-motivation, maturity and responsibility to develop an independent arts project such as a series of paintings for an exhibit, a large-scale sculpture installation, a design proposal for an architectural structure or other ambitious project for the duration of the semester. A series of sketches, studies and plans are generated prior to project approval. Students work independently and creatively to develop and complete work within set timelines. Routine critiques from peers and the teacher will guide progress towards a final exhibition of work completed. An artist statement will be developed along with the final project presentation.

???	HON	Art 4: College Art Portfolio Prep	12	Semester	1.0

Prerequisite: Art II, Art III

College Art Portfolio Prep is for first semester seniors who are applying to higher education art programs, or students who want to develop an art portfolio for careers in art and design. Fields of interest may be fine arts, photography, architecture, illustration, graphic design, etc.. Portfolios will consist of 15-20 samples of high quality artworks that demonstrate both depth and breadth of skills and particular interests. Creating an artist resume and portfolio will prepare students for college reviews, art scholarships as well as for prospective design related jobs. Seniors will work both independently and in partnership with the art teacher to edit and present work with an emphasis on their particular area of interest. Exhibition in the Senior Art Show provides an opportunity to showcase your best work.

727	CP	Painting	9-12	Quarter	0.5

This course will build an understanding of both traditional and contemporary fine arts painting methods. Students will learn painting techniques, color theory and build their skills with mixing colors in acrylic, tempera, gouache and watercolor. A focus on identifying and creating depth, values, color intensities, personal content and intent in compositions will guide each project. Students gain experience with painting from direct observation, using heightened color in expressionism and exploring pure form in abstraction. Visual research and connection to art history will inform our painting choices. Collaborative critique and presentation of artwork will promote further artistic growth.

725	CP	Sculpture	9-12	Quarter	0.5

Prerequisite: Art

Sculpture class builds upon students' understanding of three-dimensional design principles along with the elements of form and space. Students will work with a variety of materials such as: paper, clay, wood, plaster, wire, paper mache and found objects to create works of art. Assembling, modelling, carving and other methods will be explored. Each unit will involve sketching, planning, problem solving and constructing hands-on projects. Art history will be introduced through research, discussions/lectures. Skill building in various media will provide you with confidence and more options for self-expression and creating meaningful art. Both traditional and contemporary sculpture topics will be covered. Individual and group critique will guide decision making. Exhibition of final products provide opportunity for self-expression and making connections.

724	CP	Ceramics 1	9-12	Quarter	0.5

This course focuses on the basic concepts, skills and techniques involved in the creation of ceramic pieces through the exploration of hand-built forms. Projects will include pinching, slab rolling, coiled pottery, and sgraffito tiles. Special emphasis will be placed on crafting effort and design quality. Both traditional and contemporary art forms will be studied. An introduction to working with glazing applications and experimental surface treatments will be covered. Students will be responsible for all classroom hands on assignments, sketches, quizzes, and research projects. Collaborative and self-critique, along with art exhibition is an important part of the class curriculum.

724B	CP	Ceramics 2	9-12	Quarter	0.5

Prerequisite: Ceramics 1

Ceramics II students will have the opportunity to further develop both functional and sculptural work utilizing both hand-building techniques and wheel-thrown forms. Additionally students will learn about mold-making, slump molds. Students will further their knowledge of glaze applications, and unique surface treatments. Both traditional and contemporary art forms will be studied. Students will be responsible for all classroom hands on assignments, sketches, quizzes, and research projects that are assigned. Collaborative and self-critique, along with art exhibition is an important part of the class curriculum.

MUSIC

Course #	Level	Title	Grades	Length	Credits
	CP	Beginning Band	9-11	Full Year	2.0

Prerequisite: A strong ability to work independently for extended periods of time.

Beginning Band is a performance class for students with no instrumental experience who wish to develop their proficiency on a woodwind, brass, or percussion instrument to an Intermediate level. Instruction will include instrumental technique, music reading and interpretation, music theory, and performance skills. Students will study and perform a variety of

contemporary and traditional literature written for wind band and marching band. Components of this course include concert band and marching band. In addition to a very exciting performance schedule, the band also attends music festivals, concerts, community events, and professionally-adjudicated clinics. Student progress will be evaluated by means of recorded assignments and public performances. Detailed schedules and policies may be found in the Band Handbook provided by the Band Director.

Note: As a member of the AHS Band, students are **required** to perform with the band at evening and weekend concerts, competitions, festivals, and other performance events, as well as attend weekly after-school rehearsals as needed to meet the band's performance objectives. While students in this course are not required to participate in Marching Band, it is highly encouraged.

713	H	Concert Band	9-12	Full Year	2.0

Prerequisite: Prior instrumental experience, music theory knowledge, & approval of the Band Director/Director of Music.

Concert Band is a performance class for students *with prior instrumental experience* who wish to develop their proficiency on a woodwind, brass, or percussion instrument to an Advanced level. Instruction will include instrumental technique, music reading and interpretation, music theory, and performance skills. Students will study and perform a variety of contemporary and traditional literature written for wind band and marching band. Components of this course include concert band and marching band. In addition to a very exciting performance schedule, the band also attends music festivals, concerts, community events, and professionally-adjudicated clinics. Student progress will be evaluated by means of recorded assignments and public performances. Detailed schedules and policies may be found in the Band Handbook provided by the Band Director.

Note: As a member of the AHS Band, students are **required** to perform with the band at evening and weekend concerts, competitions, festivals, and other performance events, as well as attend weekly after-school rehearsals as needed to meet the band's performance objectives. Students will also be required to participate in marching band and attend Band Camp for one week in August prior to the start of the school year.

716	H	Concert Choir	9-12	Full Year	2.0

Prerequisite: Prior choral experience, music theory knowledge, & approval of the Band Director/Director of Music.

Concert Chorus is a performance class for students with a genuine love for singing with others, regardless of previous musical background. Students in this course will develop their singing ability to an Intermediate level. Instruction will include vocal technique, music reading and interpretation, music theory, and performance skills. Students will study and perform a variety of contemporary and traditional literature written for choir. In addition to a very exciting performance schedule, the chorus also attends music festivals, concerts, community events, and professionally-adjudicated clinics. Student progress will be evaluated by means of recorded assignments and public performances. Detailed schedules and policies may be found in the Choir Handbook provided by the Choral Director.

Note: As a member of the AHS Chorus, students are **required** to perform with the chorus at evening and weekend concerts, competitions, festivals, and other performance events, as well as attend weekly after-school sectionals as needed to meet the chorus' performance objectives.

701	Std	Intro to Guitar	9-12	Quarter	0.5

Prerequisite: A strong ability to work independently for extended periods of time.

This course is for students having little or no experience with the guitar. Students will learn to play simple pieces of music, reading standard music notation and tablature and using proper guitar technique. Major guitar compositions and internationally renowned guitarists will also be explored during the class. Student progress will be evaluated by means of written assessments and individual in-class performances. Students will complete their final exam for the course through a class recital.

748	Std	Intro to Music Theory	9-12	Semester	0.5

Prerequisite: Students should possess a strong desire to compose and create music. Students must provide their own headphones for class.

This course will introduce and review the components of basic music theory. The course is for all students in grade 9-12 that want to explore the basic concepts of music making and music reading. This course will be hands-on and creative. Students will be introduced to the fundamentals of the piano keyboard as they move through basic theory. Students in any music department ensemble (band/chorus) are highly encouraged to take this course.

749	Std	Intro to Music Technology	9-12	Quarter	0.5

Prerequisite: Students should possess a strong desire to compose and create music. Students must provide their own headphones for class.

This course will provide students with hands-on experience of a variety of music technologies. Course topics will include musical composition, audio editing, music critique, website design and technology research. Students will explore the effect music technology has on our world and how technology has affected music in our lives. Students will learn basic terms associated with music editing and will also study basic music theory topics. Student progress will be evaluated by means of written assessments, projects, and in-class presentations.

750	Std	Music History	9-12	Quarter	0.5

In this course students will learn about the evolution of music and the development of different genres, ranging from the early 12th-century through modern music in the 21st century. We will cover prominent artists from various genres and decades who had significant influence on the music of today.

715	Std	Introduction to the Theater	9-12	Semester	1.0

Introduction to the Theater course provides an overview of the art, conventions, and history of the theater. Although the courses may include experiential exercises, they emphasize learning about the theater, and how it gets applied to performances. Students learn about one or more of the following topics: technical theater basics (stagecraft, stage management, technical rehearsals and performance), basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art. This course may also explore other aspects of theatrical production such as technical aspects, costumes, makeup, etc.

715A	Std	Theater 2	9-12	Semester	1.0

Theater 2 builds upon the foundational skills developed in Introduction to Theater, focusing on practical application and collaborative creation. Students will delve deeper into various aspects of theater production, including acting, technical theatre, design, and ensemble work. This course is structured on a rotating schedule: one week of classroom instruction followed by one week of hands-on workshops in the theatre.

PHYSICAL EDUCATION & HEALTH

Course #	Level	Title	Grades	Length	Credits
928	CP	Health & Physical Education I	9-10	Semester	1.0
This is a mandatory semester course that meets on a rotating basis for freshmen. In order to receive credit for Physical Education/Health, you must pass both the physical education and health components. This course will address most standards of the Massachusetts Health/P.E., Curriculum Frameworks and also The Presidential Challenge Fitness Test. The students are provided opportunities for co-educational skill development strategy implementation, as well as rules and regulations in a wide variety of sports and games. There will be emphasis on lifetime and carryover activities including personal fitness and a wellness approach to life beyond high school. The Health Education component offers subjects such as consumer health, substance abuse, mental health and sexuality education.					
929	CP	Health & Physical Education II	10-12	Semester	1.0
Prerequisite: Health & Physical Education I This is a mandatory semester course that meets on a rotating basis for 10-11th grade students. In order to receive credit for Physical Education/Health, you must pass both the physical education and health components. This course will follow the Massachusetts Frameworks and the student will also take the pre and post Presidential Fitness Test which is a requirement. The class will continue with exercise, recreational activities, Project Adventure, and team building curriculum. The health education component will include current events and up-to-date subjects that affect our students emotionally and socially. Topics will include issues and self-help disease and their signs and symptoms, substance abuse and misuse, mental health responsibilities and dangers of risk behaviors. The class will also cover the systems					
930	Std	Movement Skills I	9-12	Term	0.5
Students will explore a variety of movement forms, motor skills, physical fitness components, and principles in order to engage in purposeful and health-promoting physical activity, including sports and games.					
931	Std	Movement Skills II	10-12	Term	0.5
Prerequisite: Health & Physical Education I Students will demonstrate competence in, and knowledge of, a variety of movement forms, motor skills, physical fitness components, and principles in order to engage in purposeful and health-promoting physical activity, including sports and games.					
932	Std	Movement Skills III	10-12	Term	0.5
Prerequisite: Health & Physical Education I Students will maintain competence in, and knowledge of, a variety of movement forms, motor skills, physical fitness components, and principles in order to engage in purposeful and health-promoting physical activity, including sports and games.					
933	Std	Movement Skills IV	10-12	Term	0.5
Prerequisite: Health & Physical Education I Students will expand knowledge of a variety of movement forms, motor skills, physical fitness components, and principles in order to engage in purposeful and health-promoting physical activity, including sports and games.					

SPECIAL EDUCATION

The goal of Special Education is to foster increased independence while providing access to the general education curriculum. Students' needs are met on an individual basis to best ensure success in school and beyond in the least restrictive environment. The Team will develop an Individualized Education Program (IEPs), in accordance with state and federal laws and guidelines, for students found eligible for services. Eligibility is determined by the Team following an evaluation process. Athol High School provides a range of services for students with disabilities.

Each student's Team determines all Special Education services, and classes are scheduled accordingly.

Inclusion
Inclusion classes are designed to support students who have an Individualized Education in successfully accessing general education standards with classroom accommodations. These classes may be co-taught. In the co-taught class, a general education teacher and a special education teacher are responsible for providing classroom accommodations as outlined in the student's Individualized Education Program.

Futures
Futures is a Special Education program designed to service students with intellectual disabilities. The Guided Learning Program is a substantially separate setting, serving students with intensive needs in the areas of functional academics, activities of daily living, and social/ vocational skill development within the school and community settings. Therapies are provided in the areas of speech/language, physical and/or occupational therapy. Students in this program participate in statewide assessment as outlined in their IEPs.

Strive
Strive is a Special Education program that can also be accessed by students with 504 accommodation plans. The program provides behavioral and social emotional support in order for students to successfully access grade appropriate curriculum. Support is provided through the development of individualized behavior intervention plans, a class-wide level system, and individual or group counseling provided by the School Adjustment Counselor.

STEM ADVANCED PLACEMENT ACCESS EXPANSION OPPORTUNITY

Beyond the menu of regular online courses offered through Edgenuity and VHS, Athol High School has been accepted into the **STEM Advanced Placement Access Expansion Opportunity (SAPAO) Program.** This program gives students free access to seven different AP STEM high school courses offered through the VHS online platform. The luxury of taking an online AP course is that these courses provide great flexibility when building your schedule, can be accessed at all times, and provide the student with collaborative and engaging learning opportunities. The availableAP STEM courses are as follows:

- AP® CalculusAB
- AP® Statistics
- AP® Computer Science Principles
- AP® Biology
- AP® Chemistry
- AP® Physics 1:Algebra-Based

- AP® Environmental Science

INTERNSHIPS & VIRTUAL HIGH SCHOOL

Course #	Level	Title	Grades	Length	Credits
909	CP/H/AP	Online Courses*	9-12	Varies	0.5-3.0

Prerequisite: Requires approval
Athol High School utilizes both Edgenuity and Virtual High School (VHS) for online course offerings. VHS is "a non-profit organization that collaborates with schools to offer online,content-rich, credit-bearing high school courses to students across the country and around the world." There are a limited number of district-paid courses for students' use. Courses are taken during the school day as part of a student's schedule in the school library/media center, monitored by the school librarian. Each student and parent/guardian must sign a contract agreeing to the participation requirements. Each course is taught by a certified teacher contracted with VHS, and the grading of the course is done by the VHS teacher.

One credit will be awarded for the successful completion of the course and will be weighted according to the level of the course as one of the following, per the Athol High School weighting system: College preparatory (CP), honors, or Advanced Placement (AP). All courses with the exception of AP courses are semester-long. Students taking AP (year-long) courses are expected to take the AP exam for a fee in the amount determined by the College Board.

996	CP	Internship*	11-12	Term	0.5
996A	CP	Internship*	11-12	Semester	1.0

The School to Career internship at Athol High School will promote exploration and skill building in the areas of self-awareness, future planning, career development, and personal responsibility through a contracted internship placement within the high school or area communities. The experience is designed to enhance and demonstrate the relevance of the student's academic world to the world of work and to establish a foundation for enabling students to make good decisions about career choices.

DUAL ENROLLMENT/COLLEGE COURSES

Students who meet eligibility requirements as determined by age/grade, GPA and Multiple Measures have an opportunity to take college-level courses offered by local colleges. These courses vary based on interest and instructor availability and may take place at Athol High School. Courses worth at least three college credits may also be used for 1.5 Athol High School credits weighted the same as an AP course.

996B	CP	Internship*	11-12	Full-Year	2.0-5.0
MWCC 30	AP	MWCC SPC 113. Speech	11-12	Semester	1.5

Prerequisite: MWCC ENG 101

This course introduces students to the basic skills of extemporaneous speaking through preparation and practice. Emphasis is placed on managing speech anxiety, audience analysis and adaptation, organization and outlining skills, research skills, critical thinking and argumentation, visual aids and technology, and effective delivery. Students deliver a minimum of 4 to 5 graded speech assignments. These may include but are not limited to 1.5 to introduction speeches, informative speeches, impromptu speeches, demonstration speeches and persuasive speeches. At least two of the speech assignments will require academic research.

MWCC 21	AP	MWCC ENG 101. College Writing	11-12	Semester	1.5

Prerequisite: MWCC ENG 098, MWCC RDG 098, MWCC FYE 101, or placement

Students will develop college-level English writing skills with an emphasis on the writing process, an awareness of purpose and audience, and an understanding of grammar, punctuation, and sentence structure. Reading selections will foster improved writing skills and critical and analytical thinking. By semester's end, students will have produced at least four essays totaling 12-15 pages of original, polished prose, as well as additional writing in varied forms, such as journals, free-writes, peer review, reading responses, and rough drafts. Students are required to successfully complete the MWCC Library Research Skills MOOC and will write at least one paper that incorporates outside source material. Working with an instruction librarian on the research project is encouraged

MWCC 12	AP	MWCC MAT 143. Statistics	11-12	Semester	1.5

Prerequisite: MWCC MAT 092, or placement

This course presents students with an understanding of elementary statistics by familiarizing them with basic concepts of measures of central tendency and variability, regression and correlation, probability, discrete and continuous random variables, the Central Limit Theorem, confidence intervals, and hypothesis testing. A calculator is required. MAT 093 is required for students taking this course who tested into and successfully completed MAT 092 with a grade of C or better.

MWCC 28	AP	MWCC SOC 103. Introduction to Sociology	11-12	Semester	1.5

Prerequisite: MWCC ENG 098, MWCC FYE 101, MWCC RDG 098 or placement

Students are introduced to the scientific study of society through basic sociological concepts. Concepts covered will include culture, socialization, social statuses and roles, social inequalities (race, class, gender and age), social institutions (such as family, education, religion, economy, government, politics, media and health), deviance, and social change. In order to create global awareness, students will develop critical thinking skills by making connections between their own lives and the broader social community. Students will be introduced to theoretical perspectives of sociology and use these theories to examine the various topics. Students will also examine and explain systems of stratification; and critically apply the concepts discussed to issues in their lives and the world.

MWCC 44	AP	MWCC PSY 105. Introduction to Psychology	11-12	Semester	1.5

Prerequisite: MWCC ENG 098, MWCC FYE 101, MWCC RDG 098 or placement

Students are introduced to the basic concepts and methods of psychology. Course content surveys scientific methods, the brain and nervous system, sensation and perception, consciousness, learning and memory, personality, psychological disorders, and treatment of the body and the TrainingActive Bystander curriculum