

Mohawk Trail Regional School

Course Catalog

2019-2020

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GENERAL INFORMATION

Graduation Requirements

In order to be eligible for a Mohawk Trail Regional High School Diploma, a minimum of **168** credits in core academic courses and electives are required for graduation. Core academic requirements are met when students pass the minimum number of required courses. Students accumulate elective credit for any courses taken beyond core academic requirement.

In accordance with the Massachusetts Education Reform Act of 1993, students must attain a passing score on the MCAS (Massachusetts Comprehensive Assessment System) in English Language Arts, Mathematics, and Science (typically Biology) in order to be eligible to earn a high school diploma. Students initially take the English and Math assessments in 10th grade, and the Biology MCAS is offered twice a year, with most students taking it in their 9th grade year.

Graduation Requirements and Required Courses

English	4 courses (students must be enrolled in English every year)
Math	4 courses
Science	4 courses
World Language	2 courses (in the same language)
Social Studies	4 courses (must include U.S. History by state requirement)
Physical Education/Wellness	2 courses
The Arts	1 course
Electives	6-7 courses
Senior Capstone	1 course (required course)

All students must register for a full course load of 48 credits per school year. The expectation is that all students will be enrolled in 24 credits per semester unless alternative arrangements (such as dual enrollment at Greenfield Community College) have been made before the semester begins. Seniors are allowed to have only one unscheduled (free or open) block per semester (this block must be Block 1 or Block 4). Mohawk Trail Regional High School operates a block schedule assigning course credit based upon the frequency of a course meeting:

- 12 credits for a class meeting every day for the school year (180 days)
- 6 credits for a class meeting every day for a semester (90 days)
- 3 credits for a class meeting every other day for a semester (45 days)

The school administration and the School Committee reserve the right not to offer any course that is considered under-enrolled. Some of the courses offered in this catalogue may not be offered in the schedule due to changes in staffing or scheduling constraints.

Grade levels and prerequisites may be waived in certain exceptional cases. If a course is listed as a prerequisite, a final grade of C or better in that course is usually required.

A student may not repeat a course for credit if they have already been awarded credit for the same course, regardless of performance level. Exceptions include courses such as Physical Education, Band, Chorus, and Academic Support courses.

Curriculum Levels

Mohawk offers courses at a variety of academic levels:

Advanced Placement (AP)

Honors

College Preparatory

An Advanced Placement (AP) course is considered by the College Board to be a college-level course, and is weighted more heavily in the calculation of GPA (grade point average) than an Honors course. **All students taking AP courses are required to take the AP (Advanced Placement) exam associated with the course and there is a fee assessed by the College Board for the test; consult with your guidance counselor if you have questions.** Students who take the AP course but do not take the AP exam will not receive the AP designation on their final course transcript; if they do not take the exam the course will be revised to an Honors course for the purpose of the transcript and weighted grade. A course taken at the Honors level carries greater weight in the calculation of the GPA (grade point average) than a course taken at the standard College Preparatory level.

Most academic courses are offered with both Honors and standard College Preparatory levels in the same class; students register for the course level and will also have the option in the opening weeks of class to make adjustments to the course level for Honors or standard College Preparatory credit. Students should consult with the teacher to learn more about the academic level expectations within that course.

Grading System and Class Rank

Courses are weighted when computing class rank and GPA. See chart below. Class rank and GPA includes all students in their core academic areas only: English, Math, Social Studies, Science, and World Languages. It does not include courses taken at the local community college; that GPA stands separately. Placement Level and the associate Grade Point Value are listed below:

Placement level	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
PL 3 College Preparatory	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.3	2.1	1.9	1.7	1.5	0
PL 4 Honors	4.0	3.8	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.2	2.0	1.8	0
PL 5 AP Advanced Placement	4.2	4.0	3.8	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.2	2.0	0

Academic Standards

F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A	A+
< 60	60- 62	63- 66	67- 69	70- 72	73- 76	77- 79	80- 82	83- 86	87- 89	90- 92	93- 96	97- 100

Independent Study courses and courses taken outside of Mohawk, including online, Greenfield Community College, or correspondence courses, are not considered when GPA (Grade Point Average) is calculated.

Promotion to the next grade level

Students must earn the following number of credits in order to officially advance to the next grade. Students with fewer than the necessary number of credits will be allowed to participate in the activities of their original class, but will not be officially promoted until they have earned the required credits.

- Credits needed to be promoted to 10th grade: 40
- Credits needed to be promoted to 11th grade: 80
- Credits needed to be promoted to 12th grade: 120

Credits are earned by completing classes with a passing grade and credit is awarded at the end of each semester. (Credit for yearlong courses such as AP courses is awarded when the course is completed.) A semester is one half of the school year. Semester one is from late August to mid-January, semester two is from mid-January - June.

Planning a schedule

Parents and students are encouraged to consult with guidance counselors, teachers, and the administration in the preparation of a student’s course of study. Decisions at earlier grades can and do have an impact on college and career options. Schedule changes will only be allowed in May of the current school year for the next school year.

There are certain academic courses that students need to take in every grade to meet graduation requirements, state requirements and MCAS preparation. Below you will find grade level schedules containing the typical required courses. These sample schedules are intended to illustrate a possible schedule, and do not necessarily represent the actual placement of courses in semesters or in the daily schedule.

9th Grade Sample Schedule

Integrated-Arts English 9	Elective or PE/Health
IBL Algebra 1	IBL Algebra I
Biology I	Biology II
World Language	World History

10th Grade Sample Schedule

English 10	Elective or World Language
IBL Geometry	PE/Elective (Art)
Science	Elective (Algebra II)
Modern World History	Elective

11th Grade Sample Schedule

English Elective	Elective
Math	Science
United States History I	United States History II
Elective or World Language	Elective

12th Grade Sample Schedule

English Elective	Science
Math	Elective
Senior Capstone	Elective
Elective or World Language	Elective

Standards for Admission to Massachusetts Four Year Colleges and Universities

Minimum Admission Requirements:

MassCore meets or exceeds many of the minimum admission requirements established by the Massachusetts Board of Higher Education for four-year colleges and universities and the University of Massachusetts. However, MassCore is very closely, but not currently fully aligned with these admissions requirements. Massachusetts public four-year colleges and the University of Massachusetts, and many four-year college/university admissions officials recommend that students take the MassCore recommended Program of Studies as the minimum set of requirements for future success in college. Nearly all of the four year public colleges and universities in the Commonwealth have become competitive institutions. Students are encouraged to go beyond MassCore, particularly for competitive majors which may require even more advanced study.

The MassCore Program

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

The MassCore program includes four years of English; four years of mathematics; three years of 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 technology. MassCore also includes 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.

MassCore Massachusetts High School Program of Studies	
English/Language Arts	4 Units*
Mathematics	4 Units
	Including the completion of Algebra II or completion of the Integrated Math equivalent. All students are recommended to take a math course during their senior year.
Science	3 Units of lab-based science
	Coursework taken in technology/engineering may count for MassCore science credit. Note: The Board of Higher Education admissions standards for public colleges and universities require three (two lab-based) physical and natural science units and do not currently recognize technology/engineering as a science course.
History/Social Science	3 Units
	Including US History and World History.
Foreign Language**	2 Units
	Of the same language.
Physical Education	As required by law.
	State law (M.G.L. c. 71,s. 3) states: "Physical education shall be taught as a required subject in all grades for all students." Health can be integrated into Physical Education, science, or taught as a stand-alone course.
The Arts**	1 Unit
Additional Core Courses	5 Units
	Business Education, Career and Technical Education (CTE), Health, Technology (e.g., computer science, desktop publishing, multimedia and web design), or any of the subjects above.
Additional Learning Opportunities	Complete as many of the following as possible:
	Advanced Placement (AP); Capstone or Senior Project; Dual Enrollment courses taken for both high school and college credit; Online courses; Service Learning; and Work-based Learning.
<p>*A unit represents a full academic year of study or its equivalent in a subject that covers all the standards contained in a specific Curriculum Framework.</p> <p>MassCore is the recommended program of study that Massachusetts high school students need in order to be better prepared for college and a career. Developed by a statewide advisory group from the K-12, higher education and business sectors, MassCore maintains flexibility for students and high schools while allowing districts to set additional graduation requirements. Courses included in MassCore should be rigorous, engaging, and based on appropriate Massachusetts Curriculum Frameworks high school level standards.</p>	

NCAA Eligibility Center

The NCAA, or National Collegiate Athletic Association, was established in 1906 and serves as the athletics governing body for more than 1,300 colleges, universities, conferences, and organizations. The NCAA is committed to the student-athlete and to governing competition in a fair, safe, inclusive, and sportsmanlike manner. The NCAA Eligibility Center certifies the academic and amateur credentials of all college-bound student-athletes who wish to compete in NCAA Division I or II athletics. Colleges in Divisions I and II may offer athletic scholarships, while Division III colleges and universities may not. To assist with this process, the Eligibility Center staff fosters a cooperative environment of education and partnership with high schools, high school coaches, and college-bound student-athletes.

Ultimately, the individual student-athlete is responsible for achieving and protecting his or her eligibility status. **Consult with your guidance counselor to determine which Mohawk courses have been approved by the NCAA Eligibility Center as core academic courses and to begin the eligibility process by the beginning of your sophomore or junior year.**

SPECIAL PROGRAMS AND OPPORTUNITIES

Dual Enrollment at Greenfield Community College (GCC)

Academically eligible junior and senior students can take courses at GCC. The student and family are responsible for transportation to GCC. The credit earned is transferable and applicable to Mohawk graduation requirements but will not be included in the student's grade point average. Mohawk will accept additional credits a student earns from GCC beyond this one course but the student and family are responsible for the tuition, fees, books and transportation associated with additional courses. Please consult with the Guidance Counselor when planning what courses to take. Introduction to Robotics and Electronics is offered at Mohawk taught by Mohawk faculty and qualified students (who take the Accuplacer and score above a threshold established by GCC) can earn college credit at GCC for the course.

Internship Programs

Mohawk offers a limited number of selective internship opportunities within the school and some internship sites in the community. The purpose of the program is to provide juniors and seniors with the opportunity to explore and experience specific careers prior to moving on to work and/or post-secondary education and training. To be placed in an internship, a student must demonstrate a strong work ethic, an ability to work independently, and reliability. **Internship credits are elective and cannot be used to fulfill core academic requirements.** Internships are based on the availability of appropriate placement sites. Internship placements must be fully established prior to the start of a semester. Interested students should consult with their guidance counselor at least one month prior to the semester in which they intend to engage in the internship to discuss the process and their interest. Students in internships will be assessed using the Massachusetts Work-Based Learning Plan to identify and rate relevant workplace skills and qualities. For fall internships, students need to meet with their guidance counselor the spring prior. Applications and additional information are available in Student Services. See the section on Internships in the Electives chapter. Students who wish to be considered as Teaching Assistants or to work in other school settings (such as the library) need to make arrangements with the educator with whom they wish to work and submit a Teaching Assistant proposal.

Work Study

Mohawk is in the process of developing a work study credit program for upper level students who meet the requirements. Please consult with your guidance counselor for additional information. This opportunity is a mutual effort between the students, employers, and The Mohawk Trail Regional School to provide work opportunities that allow students to earn credit for part-time employment, gain skills, and discover areas of career interest. This program requires that the student be currently employed and actively working through the school week. The student will be evaluated by their site supervisor and the School Guidance Counselor based upon the work based learning guidelines identified by the state. Students must fill out a work-based learning plan each semester they intend to work and earn credit. This plan highlights the skills students will gain through their employment. This program can provide juniors or seniors to be released from school during one block to attend their Work Study and complete their required mandatory hours. Students cannot use work study to graduate early. **Work study credits are elective and cannot be used to fulfill core academic requirements.**

Independent Study

Students may submit an application for consideration to pursue an independent study project under faculty supervision. **Independent Study courses are awarded pass-fail elective credit and may not be used to fulfill graduation requirements in core academic areas.** Students should consult with their guidance counselor and fill out an Independent Study Proposal form **before** the beginning of the semester. In general students are advised to pursue subjects of independent study inquiry through the Senior Capstone Seminar, but thoughtful and thorough proposals from younger students will be considered. These courses are designated with UD (for Uniquely Designed) next to the course number on the transcript.

For Seniors Only!

9950 SENIOR CAPSTONE SEMINAR (6 credits, one semester)

This course is a graduation requirement.

The Senior Capstone course is a culminating academic experience that takes place during fall semester. All seniors take the course and learn how to direct their own learning on a topic of their choice to encourage you to think critically, solve challenging problems, and develop skills such as oral communication, public speaking, research skills, media literacy, teamwork, planning, self-sufficiency, and goal setting—i.e., skills that will help prepare you for college, modern careers, and adult life! Capstone projects also encourage students to connect their learning to community issues or problems, and to integrate outside-of-school learning experiences, including activities such as interviews, scientific observations, creative events or internships. Over the course of the semester students propose, design, research, execute, present, and reflect on their project. All students also take part in the Capstone Presentation Event which is attended by the community at large. This is a team-taught course with a number of faculty directly involved.

Academic Support Center

ACADEMIC SUPPORT CENTER

9911 (3 credits; this course meets every other day for a semester)

9901 (6 credits; this course meets daily for a semester)

The Academic Support Center is a course provided to students who have Individual Education Plans. This course is provided everyday or every other day depending on the student's need. In order to provide a supportive structure for ALL students and provide students with skill-building

and daily Academic Support that IEP plans require, time in class will be devoted to skill-building activities related to individual IEP goals, such as computer-based assignments, discussions, pre-teaching and reinforcing information from their content area classes whenever possible. Some portion of the class period will also be a supported structured study to help assist students with current course assignments.

ENGLISH LANGUAGE ARTS

English

4 courses

To fulfill Mohawk's graduation requirement, students must take 4 English courses. Students must take at least one English course every year and many students choose to take more as the English Department has a rich array of electives.

For 9th grade students:

117 INTEGRATED-ARTS ENGLISH 9 (6 credits; one semester)

11193 HONORS INTEGRATED-ARTS ENGLISH 9 (6 credits; one semester)

Both an examination of the individual and the collective, English 9 aims to get students thinking about their place in our community, our country, and our world. This is a co-taught, integrated-arts course which uses a creative, hands-on approach to explore the concepts of identity, personal values, perspective, and influence to build students' reading, writing, artistic, and thinking skills. This course also includes an extensive study of grammar, and will incorporate visual literacy, media analysis, art history, multiple approaches to expression, and genres of reading and writing particular to the art world. Students will be required to complete independent reading and writing, create visual arts projects, participate in peer revision circles, and present their work to the whole class. The course culminates in the design, implementation, and presentation of a major independent project. An **Honors English 9** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to complete the extension option on all major assignments, read a work of non-fiction independently, and write an additional case study on that book for their final portfolio.

For 10th grade students:

11231 ENGLISH 10 (6 credits; one semester)

11242 HONORS ENGLISH 10 (6 credits; one semester)

How did our ideas of what it means to be an American develop and evolve? In this tenth grade course students read and discuss major works of American literature, considering historical context and making connections to contemporary issues. The course focuses on developing advanced expository writing skills, including persuasion and logical argument; developing close reading skills of complex texts; synthesizing complex readings and ideas, and developing other necessary literacy skills. **To earn honors credit**, the highly motivated sophomore will complete a series of extended learning assignments that ask students to explore and apply literacy skills beyond the scope of the course in ways that prepare them for the rigors of more advanced levels of study.

Choices for Juniors and Seniors:

11233 WOMEN AND FICTION (6 credits; one semester)

11234 HONORS WOMEN AND FICTION (6 credits; one semester)

As Virginia Woolf observes in the opening pages of her essay, *A Room of One's Own*, "The title women and fiction might mean...women and what they are like; or it might mean women and the fiction that they write; or it might mean women and the fiction that is written about them; or it might mean that somehow all three are inextricably mixed together and you want me to consider them in that light." This course will consider that mix, reading a variety of texts about and by women, while drawing on historical context to examine women's role both within the English canon and as outsiders and critics of that canon. Discussion will include the experiences of women through time, the changing nature of the feminist movement, media representations of women, current events, intersections with race and class, and how gender relations shape our world. This course requires students to do a significant amount of independent reading, complete a wide variety of writing assignments, and participate in discussions and presentations. An **Honors Women and Fiction** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to read short pieces of gender theory and criticism, write with a higher level of complexity, and opt for more challenging assignment topics.

11345 HOW TO THINK: Reading Literature and the World (6 credits; one semester)

113451 HONORS HOW TO THINK: Reading Literature and the World (6 credits; one semester)

Is Miley Cyrus's "Wrecking Ball," really just a Marxist critique where she takes control of the means of production in order to break down class barriers? What would Freud think of Harry Potter's wand? Now you can find out! This course is an introduction to the concept and use of critical lenses and the various ways that thinking humans approach their worlds. Students will become well versed in how, why, and when different critical lenses are useful in analysis, and will engage with current media and pop culture, as well as a variety of canonical literature, to explore and practice using critical lenses, including race, gender, and social class. Students will be expected to read and write independently, as well as participate in class discussion and presentations. An **Honors How to Think** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to complete extended reading and/or research, and demonstrate their ability to use multiple lenses in concert. It's like exercise, but for your brain.

141 HUMANITIES (6 credits; one semester)

11414 HONORS HUMANITIES (6 credits; one semester)

Also known as, "I just checked in to see what condition, my condition is in," Humanities is a rigorous course examining the myths, beliefs, and philosophies of Western culture through fiction, nonfiction, and the arts all the while locating these texts within their historical settings. Structured around the Socratic method, Humanities' students will read Euripides' *The Bacchae*, *The Epic of Gilgamesh*, and Dante's *Inferno*, view works of art created prior to the Enlightenment and watch modern films such as *Hercules*, *Black Swan*, and *Black Orpheus* while making cultural connections between the texts and our Western culture. This course features a wide range of writing assignments including expository, analysis, and persuasion pieces. An **Honors Humanities** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to read an additional, supplemental text and provide greater research into the topics discussed, as well as lead a class discussion.

11346 READING AND WRITING CULTURE (6 credits; one semester)**11753 HONORS READING AND WRITING CULTURE (6 credits; one semester)**

To what extent does pop culture reflect our society's values? How are our individual social and political values shaped by our community? How do experiences as children affect the way we see ourselves later in life? What is the value of listening and reflection? In this course, students will consider questions such as these about the world they live in, synthesizing ideas from writers across genres (nonfiction, fiction, poetry, film, etc.) as they develop close reading skills and the ability to enter the conversations of public discourse with their own unique viewpoints, both verbally and in writing. The course is designed to create critical readers and successful writers and crafters of language for a variety of academic, professional, and personal arenas. **To earn honors credit**, the highly motivated junior or senior will complete a series of extended learning assignments that ask students to explore and apply literacy skills beyond the scope of the course in ways that prepare them for the independent rigors of college study.

GLOBAL PERSPECTIVES THROUGH LITERATURE (6 credits; one semester)**HONORS GLOBAL PERSPECTIVES THROUGH LITERATURE (6 credits; one semester)**

Travel is often a life-changing experience, but when you can't actually go somewhere, a book is a good substitute. This course uses a variety of poetry and prose written by authors from South America, Africa, the Middle East, and Asia to expose students to non-Western themes, symbols, and literary traditions. From call and response oral folklore to magical realism, we'll investigate how literature is shaped by culture and environment. Projects, papers, and assignments will be as diverse as the texts we read. Students will be expected to read and write independently, as well as participate in class discussion and presentations. An **Honors Global Perspectives** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to complete extended reading and/or research, and lead the class in activities related to their independent work.

For Juniors only:

139 AP ENGLISH LANGUAGE AND COMPOSITION (12 credits; full year)

(Students must take the AP exam to earn AP credit for this course.)

This Advanced Placement English course is at the college level and designed to create critical readers and successful writers and crafters of language in academic, professional and personal arenas. As students explore a variety of issues of our modern world (i.e. American materialism, economic inequality, gender roles, etc.), they will learn to analyze expository, analytical and argumentative writing across genres (nonfiction, fiction, poetry, etc.) with a close eye on the rhetorical strategies and techniques that are being employed. Students will develop close reading skills and the ability to determine audience and purpose in order to communicate information clearly and effectively using a variety of tools/media in varied contexts for a variety of purposes. Using these skills, they will work on improving their own writing by using the strategies and techniques that they have seen modeled. The course culminates in the AP exam in May. This is a year-long course and requires summer reading and writing. **Prerequisite: completion of summer assignment.**

For Seniors only:

11433 AP ENGLISH LITERATURE AND COMPOSITION (12 credits; full year)

(Students must take the AP exam to earn AP credit for this course.)

This class is specially designed to assist students in passing the AP Literature test in the spring, and

uses as a benchmark the *AP English Course Description* from the College Board. In addition to working towards passing the test, you will have a chance to read, discuss, and write about literature. This course will look at both canonical literature and literature that rests outside the mainstream. We will look at different ways to analyze literature, eventually coming to terms with a “second language,” or a language that looks beyond the plot of a text or the meaning of a poem. We will constantly ask ourselves who the author is, who is his or her audience, what message or meaning can we glean from the text, and how has the author brought his or her message across to the reader.

MATHEMATICS

4 courses required to graduate

The Mathematics Department recommends that students strive to reach Algebra II or as much math as possible in preparation for the MCAS test in the spring of the sophomore year.

The course sequence is as follows:

Grade 9: IBL Algebra/Honors IBL Algebra (a yearlong course)

Grade 10: IBL Geometry/ Honors IBL Geometry (one semester)

Then: IBL Algebra II/Honors IBL Algebra II (one semester) (may be taken in Grade 10)

After completing IBL Algebra II, students can select from an array of math choices including:

- **Precalculus and Trigonometry/Honors Precalculus and Trigonometry**
- **Honors/Standard Statistics**
- **Personal Finance/Honors Personal Finance**
- **Honors Calculus**
- **AP Calculus**

In all math courses, students are expected to complete daily work assignments.

Students who choose to pursue courses for Honors credit will be expected to investigate math topics at a deeper level and demonstrate their deeper understandings on activities and assessments.

For 9th Grade Students:

31321 IBL ALGEBRA (12 credits, full year)

31322 HONORS IBL ALGEBRA (12 credits, full year)

This full year algebra course provides students with a foundation for further study in high school mathematics using the Inquiry-Based Learning (IBL) approach to developing mathematical understanding. Students will look at linear relationships; develop principles for working with exponents; use statistical concepts and data from experiments to develop a formula for the period of a pendulum; investigate the relationship between systems of equations and inequalities and their graphs; investigate quadratic expressions, equations, and functions; and investigate similar triangles and proportional reasoning.

For 10th Grade students:

30333 IBL GEOMETRY (6 credits, one semester)

30334 HONORS IBL GEOMETRY (6 credits, one semester)

This is a semester course emphasizing Euclidean geometry using the Inquiry-Based Learning (IBL) approach to developing mathematical understanding. Students will investigate transformations, construction, and proof; they will explore area, volume, the Pythagorean Theorem and trigonometry;

and they will study circles and coordinate geometry. **Prerequisite: Successful completion of the IBL Algebra course.**

33411 IBL ALGEBRA II (6 credits, one semester)

33422 HONORS IBL ALGEBRA II (6 credits, one semester)

The material studied in this course is examined at greater depth and with more abstraction than in the Algebra I course, using the Inquiry-Based Learning (IBL) approach to develop mathematical understanding. Students will examine slopes, derivatives, and exponential growth; they will study circular functions and the physics of falling objects; and they will investigate families of functions and the algebra of functions. **Prerequisite: Successful completion of IBL Geometry.**

After completing IBL Algebra, IBL Geometry, and IBL Algebra II, students have the following courses to choose from:

33151 PERSONAL FINANCE (6 credits, one semester)

33152 HONORS PERSONAL FINANCE (6 credits, one semester)

The focus of this course will be to apply mathematics to real life financial situations that students will face after high school. Budgets, career research, taxes, personal credit, renting vs. buying a home, buying a car, insurance, and investing are all life skills that this course will discuss in detail. Students will work on building a strong foundation of information and skills that will help them make good decisions in the future. This class will involve extensive use of technology as students work on individual projects. **Prerequisite: This course is for Juniors and Seniors. Successful completion of IBL Algebra II or teacher approval.**

33401 PRECALCULUS AND TRIGONOMETRY (6 credits, one semester)

33632 HONORS PRECALCULUS AND TRIGONOMETRY (6 credits, one semester)

This is the fourth course in the Algebra I, Geometry, and Algebra II sequence. The course emphasis is on honing math skills in preparation for college level mathematics. This course covers polynomial, logarithmic, and exponential functions. The course also covers trigonometric functions, radian measures, circular functions, and identities. **Prerequisite: Successful completion of IBL Algebra II.**

33510 STATISTICS (6 credits, one semester)

33512 HONORS STATISTICS (6 credits, one semester)

In a world increasingly driven by data, Statistics will introduce you to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. You will learn to explore and summarize data, design experiments, and use statistical inference to make decisions. This class will focus on concepts rather than calculations and will make extensive use of technology as a statistical aid.

Prerequisite: Successful completion of IBL Algebra II.

33622 HONORS CALCULUS (6 credits, one semester)

This course is the equivalent of a first semester college calculus curriculum. It will include in-depth study of limits and continuity, the derivative of algebraic functions, applications of the derivative, and anti-differentiation as time allows. It will also include the definite integral and the fundamental theorem of calculus as time allows. This course is only offered at the honors level. **Prerequisite: Successful completion of Pre-Calculus and Trigonometry or with teacher approval.**

33633 AP CALCULUS AB (6 credits, spring semester)

(Students must take the AP exam to earn AP credit for this course.)

Students are required to take the AP Calculus AB exam in May. This course is offered in the spring semester for students who have taken 33622 Calculus in the fall. **Prerequisite: Successful completion of Pre-Calculus and Trigonometry, or Calculus, or with teacher approval.**

33644 AP CALCULUS BC (6 credits, one semester)

Students are required to take the AP Calculus BC exam in May. Topics new to this course include Parametric, Polar, and Vector Functions, Polynomial Approximations and Series • Concept of Series • Series of constants • Taylor Series. This course is often offered as in Independent study. **Prerequisite: Successful completion of AP Calculus AB or with teacher approval**

Science

4 courses required to graduate

All students are required to take 4 science courses to fulfill graduation requirements. In addition, students must earn a passing score on the required MCAS science test. Mohawk offers many Advanced Placement (AP) level science courses, some of which are offered in alternating years.

All 9th grade students take Biology 1 and Biology 2. To the extent possible, we recommend that students also take Biology 2 as 9th graders. The combination of the two courses provides students with a strong foundation for the MCAS Biology test and for subsequent high school science courses.

44013 BIOLOGY 1 (6 credits, one semester)

44014 HONORS BIOLOGY 1 (6 credits, one semester)

In this 9th grade laboratory course students are introduced to the various fields in biology and scientific inquiry. This includes chemistry of life, ecology, cell biology, genetics and scientific inquiry projects.

Students will work independently and collaboratively on lab work and problem solving. This course is directly aligned with several of the major topics covered in the MCAS Biology test and, along with the Biology 2 course, will prepare the student for their upcoming MCAS Biology test. An **Honors Biology 1** course option will be available within the class for students who are interested in exploring topics in greater depth. The Honors curriculum will cover all of the material addressed in the 44013 Biology 1 course to prepare students for the MCAS Biology test. In addition, the honors curriculum includes an inquiry-based project for each quarter, as well as weekly extensions and opportunities to explore topics in greater depth.

44023 BIOLOGY 2 (6 credits, one semester)

44024 HONORS BIOLOGY 2 (6 credits, one semester)

In this laboratory course students continue with Biology and learn about genetics and evolution, anatomy and physiology, and biodiversity. This course is directly aligned with several of the major topics covered in the MCAS Biology test and along with the 9th grade Biology 1 course, will prepare the student for their upcoming MCAS Biology test. An **Honors Biology 2** option will be available within the class and will cover all of the material addressed in the 44023 Biology 2 course, but will also provide opportunities to explore the content in greater depth. Honors extensions may include activities using modeling, predicting possible outcomes of experiments, interpreting experimental data results, and other applications which are used to help students prepare for AP science courses. **Prerequisite: successful completion of Biology 1/Honors Biology 1.**

BIO ETHICS (6 credits one semester)

In this course, students will connect scientific phenomena and research practices to their applications in society and everyday life. The course will include both case-based discussion and laboratory

applications. Students will examine the scientific research and ethical implications of topics including genetic engineering, global health equity, and clinical applications of medicine. Students will be assessed on whole-class discussions and debates, written reflections on articles and books, argumentative writing, and occasional written tests or quizzes.

SCIENCE JOURNALISM (6 credits one semester)

In this course, students will study and analyze documents such as abstracts, journals, and media. They will learn conventions governing scientific writing and their influence on the organization, use, and distribution of scientific knowledge and information. Students will practice communicating scientific concepts to various audiences, including practicing oral communication in the form of debates. Students will be assessed on class participation, group projects, and written assignments on topics that are meaningful to the individual.

44331 CHEMISTRY (6 credits, one semester)

44332 HONORS CHEMISTRY (6 credits, one semester)

In this laboratory course for 10th-12th grade students offers a basic introduction to chemistry. Standard and honors levels are offered as options in every chemistry class. The major areas of study include atomic theory, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws. Traditional and inquiry-based laboratory work, problem-solving, and writing of chemical equations will be required throughout the semester. In addition to the coursework of standard level chemistry, honors students will be challenged with extension material involving concept modeling, prediction of experimental outcomes, interpretation of experimental data, implementation of experimental design and introduction to concepts and problems covered in the AP Chemistry curriculum. **Prerequisite: Successful completion of IBL Algebra I is necessary for all chemistry students. There are no specific grade requirements for Honors Chemistry. It is open to all students who would like the challenge.**

44341 CSI MOHAWK (6 credits, one semester)

44322 HONORS CSI MOHAWK (6 credits, one semester)

This course introduces students in grades 10-12 to forensic science, which is defined by the intersection of our legal system and experimental science. The course introduces methods used by investigators to establish facts in the courtroom, including fingerprinting, bloodstain pattern analysis, soil and hair analysis, chromatography techniques, drugs and toxin screening, and DNA analysis.

Students will be asked to write persuasively, carry out and properly document laboratory analyses, and make connections between the science they have learned in previous classes and the practical applications that are required in the crime lab and the courtroom. **Prerequisite: Biology.**

44463 HONORS ANATOMY AND PHYSIOLOGY (6 credits, one semester)

This is a 6-credit semester block course open to students in grades 10-12. It is designed to study the structure and functions of the human body systems and uses a college textbook and lab manual. The students will study cells, tissues, body organization and all of the body systems and related topics.

There will be animal dissection labs related to topics. Anatomy requires frequent review of vocabulary terms, names of body structures and understanding function. This course is highly recommended for any students interested in pursuing a career in the medical or biological fields. **Prerequisite: A satisfactory grade in both Biology 1 and Biology 2 and have had Chemistry or currently enrolled in Chemistry.**

44441 PHYSICS I (6 credits, one semester)**44442 HONORS PHYSICS I (6 credits, one semester)**

This is a 10th-12th grade, 6-credit course that introduces historically, empirically, and analytically the basic concepts of physics. Inquiry-based labs will be a major component of the course. Students are expected to work independently and collaboratively to solve problems and accomplish learning goals. The major areas of study include: kinematics (the study of moving objects), dynamics (the study of interaction between two objects in contact), energy, momentum, circular motion, rotational motion, and simple harmonic motion. While the use of algebraic formulas is introduced to support the analysis of data and the making of predictions, the primary aim of the course is to allow students to develop a strong conceptual grasp of these topics. **Prerequisite: IBL Algebra and IBL Geometry.**

44352 INTRODUCTION TO ROBOTICS AND ELECTRONICS (6 credits, one semester)**44354 HONORS INTRODUCTION TO ROBOTICS AND ELECTRONICS (6 credits, one semester)**

This course introduces core computer programming logic and engineering reasoning skills through the design, construction, and operation of autonomous robots. In the first third of the course, students learn about the basic principles of electronics and the design and construction of circuits that use logic gates. The second third of the course focuses on how computer programs, microprocessors, sensors, and actuators can be used to produce a robot that interacts with its environment in a predictable and useful fashion. In the last third of the course, students work with Arduino microcontroller boards and an assortment of components to construct robots from scratch. The course introduces students to the field of electrical engineering and seeks to give students experience and access to the broad set of skills and perspectives called computational thinking. Students enrolled in this course may receive course credit from Greenfield Community College if they complete the application process. Interested students should contact the Guidance Department for assistance in enrolling with GCC.

44555 HONORS ORGANIC CHEMISTRY(6 credits, one semester)

This advanced course is for highly motivated students with a strong interest in science. Topics covered include bonding of carbon, functional groups, reactions and their mechanisms, polymerizations and nomenclatures. Projects and regularly scheduled laboratory activities reinforce the lecture and problem-solving format. **Prerequisite: Successful completion of Chemistry or Honors Chemistry.**

44353 AP CHEMISTRY (12 credits, full year)

It will be offered again in 2019-2020.

This 12 credit yearlong course covers material equivalent to two semesters of college chemistry. It is available to students in grades 11 and 12. The syllabus has been designed based upon the curriculum and frameworks developed by the College Board. Major areas of study include: atomic theory and structure, chemical bonding, states of matter, reaction types, stoichiometry, equilibrium, kinetics, thermodynamics and electrochemistry. Through labs, class activities, and problem solving, students will develop inquiry and reasoning skills such as designing a plan for data collection, analyzing data, applying mathematical equations and connecting concepts across AP Chemistry's 6 "Big Ideas". It is for the student who has a interest in chemistry beyond their introductory course. Students are expected to read and answer questions from the text, participate in class discussions, conduct experiments and prepare laboratory reports. All students are required to take the AP Chemistry exam in May to earn AP credit. **Prerequisite: Chemistry, and IBL Algebra 2 or concurrent enrollment in Algebra 2.** *Summer assignment must be completed prior to the start of the semester.*

44475 AP ENVIRONMENTAL SCIENCE (12 credits, full year)

This is a 12-credit two-semester college-level course for sophomores to seniors. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students are expected to perform on the level of first year college student. All students are required to take the AP Environmental Science Exam in May. **Prerequisite: Successful completion of Biology 1 and Biology 2.** *Summer reading and questions must be completed prior to the start of the course.*

444552 AP BIOLOGY (12 credits, full year)

This course is for the student who has a serious interest in biology and is the equivalent of a two-semester college level biology course. AP Biology is a 12 credit, yearlong course and follows the AP Biology Curriculum Framework. Class topics are divided into 4 Big Ideas: Evolution, Cell Processes, Genetics & Information Transfer and Interactions. For each Big Idea, there are units with selected chapters. For each unit, there will be an exam which follows a similar format to the AP Exam which all students will take in May. The laboratory component is at least 25% of the class time and we will be doing college level lab work. Students are expected to perform on the level of first year college student. **Prerequisites: A satisfactory grade in both Biology 1 and Biology 2. Chemistry or concurrently enrolled in Chemistry.**

44444 AP PHYSICS (12 credits, full year)

This hybrid online course is a high school and university partnership with Boston University and West Virginia University through a National Science Foundation funded program. AP Physics is often a prerequisite course to success in Engineering, Information Technology (I.T.), physics, chemistry, nursing and other medical related academic programs and professional fields. The methodology of the course is novel and hence students should be self-motivated learners and have a proven track record of handing in assignments on time. Students with an interest in science and looking for academic challenge should consider this course. A Mohawk teacher supports students as they complete online assignments. Students are required to take the AP exam in May to earn AP credit. **Math Requirement: Algebra 1, Geometry and Algebra 2 or equivalent sequence completed successfully.**

SOCIAL STUDIES

4 courses required to graduate -two of which must be US HISTORY I&II

Mohawk offers a variety of Social Studies courses designed to strengthen basic academic skills and to analyze and understand contemporary problems and issues. To fulfill graduation requirements students must take four core Social Studies courses but many students take more as electives.

Students are required to successfully complete United States History, as a two course sequence or the yearlong AP U.S. History course, to meet state graduation requirements.

For 9th grade students:

22231 WORLD HISTORY I (6 credits; one semester)

22232 HONORS WORLD HISTORY I (6 credits; one semester)

World History 9 is a class designed to be an overview of the major themes in human history, spanning from the beginning of humans' existence to roughly 1450. We analyze political, social, environmental, cultural, and economic themes and compare them across vast periods of time in

order to understand some basic human trends, behaviors, and phenomena. Topics addressed in the course include the lives of paleolithic peoples; how the advent of farming radically altered human history; how civilizations develop; how empires gain, control, maintain, and lose power; the role religion plays in society; the impact of technology on society; and cross-cultural connections developed through trade. The course includes a wide variety of primary source materials (photos, movies, novels, poems, music, art) so that students can develop and use the same thinking skills and methods employed by historians (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation). An **Honors World History 9** course option is available within the class for students who are interested in exploring topics in greater depth.

For 10th grade students:

2226 WORLD HISTORY II (6 credits; one semester)

2227 HONORS WORLD HISTORY II(6 credits; one semester)

10th grade world history builds upon knowledge and skills developed in the 9th grade course by picking up in roughly 1450 and extending into the modern era. By utilizing political, social, environmental, cultural, and economic themes, we're able to compare civilizations around the world, break down patterns of cause and effect, and follow changes and continuities through time. Topics addressed include the arrival of Europeans in the Americas, increased trade and globalization, colonization, the Enlightenment, revolutions, industrialization, nationalism, imperialism, global war, decolonization, and globalization. Beyond learning the concepts and facts of history, we will focus on writing, research, and analysis, as well as on determining the relevance of global history for today. An **Honors World History I** course option is available within the class for students who are interested in exploring topics in greater depth.

For 11th grade students:

22111 U.S. HISTORY I (6 credits; one semester)

22112 HONORS U.S. HISTORY I (6 credits; one semester)

This course focuses on the foundations of the United States from early contact between Native Americans and European settlers to the formation and then near dissolution of the Union with the outbreak of the Civil War. In addition to learning about the people and events that shaped this country, the course examines the contrasting political, economic, and social ideas that contributed to the emergence of an American identity and prompted a debate about the powers of the national government, states' rights and individual freedom. This course will help students become more skilled readers and interpreters of historical information and will expand their geographical knowledge of the United States. An **Honors US History** course option is available within the class for students who are interested in exploring topics in greater depth. The Honors course uses a college textbook and is for highly motivated students with solid reading and writing skills. Students earning honors credit will be expected to independently read three teacher-chosen works of historical fiction or nonfiction, participate in book chats for each book, and write a book review on one of the books.

22131 U.S. HISTORY II (6 credits; one semester)

22142 HONORS U.S. HISTORY II (6 credits; one semester)

This course focuses on the developments that shaped the United States from Reconstruction after the Civil War through the events of the twentieth century. The course addresses the impact of westward migration and the industrial revolution on American life, the expanding role of the federal government

in developing economic and social responses to reform efforts and domestic events, and the rise and continuing influence of the United States in world affairs. Students will also examine how the concepts of personal freedom and human dignity have evolved in the U.S. since the Civil War to the present day.

This course will help students become more skilled readers and interpreters of historical information and will expand their geographical knowledge of the United States. An **Honors US II History** course option is available within the class for students who are interested in exploring topics in greater depth. The Honors course uses a college textbook and is for highly motivated students with solid reading and writing skills. Students earning honors credit will be expected to independently read three teacher-chosen works of historical fiction or nonfiction, participate in book chats for each book, and write a book review on one of the books.

22263 AP U.S. HISTORY (12 credits; full year; students are required to take the AP Exam in May to earn AP credit for the course)

The AP U.S. History course is specifically designed to assist students in passing the AP US History exam in May. A score of 4 or 5 on the test gives students the opportunity to earn credit for two college level history classes. The course focuses on developing students' understanding of American history from approximately 1491 to the present. The course has students investigate the content of U.S. history for significant events, individuals, developments, and processes in nine historical periods, and develop and use the same thinking skills and methods employed by historians when they study the past (analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation). The course prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by two full-year introductory college courses. Juniors and seniors may take this course.

For students grades 10-12:

2221 AP WORLD HISTORY (12 credits; full year; students are required to take the AP Exam in May to earn AP credit for the course)

Explore world history more deeply through key themes such as interaction with the environment, cultures, state-building, economic systems, and social structures. Historical thinking skills are tools of analysis that lead to the ability to craft arguments from evidence; describe, analyze, and evaluate events from a chronological perspective; compare and contextualize historical developments; and analyze evidence, reasoning and context to construct and understand historical interpretations. As of school year 2019-2020, the course covers world history from 1450 CE to the present day. The course prepares students for college courses by making demands upon them equivalent to those made by full-year introductory college courses.

US GOVERNMENT AND POLITICS (6 Credits)

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?" Other topics include: Foundations of government in the United States; Purposes, principles, and institutions of government; Civil rights, human rights, and civil liberties; Political parties, interest groups, media, and public policy; and the relationship of the United States to other nations in world affairs.

AMERICAN DEMOCRACY (6 Credits)

This unique curriculum applies the signature teaching approach of Harvard Business School—the case method—to the study of democratic decision-making throughout American history, enabling students to train for active citizenship in the same way MBA candidates train for leadership in business. This participatory, discussion-based approach seeks “to equip students with a critical toolset that should help them not only to understand more fully the meaning and evolution of American democracy, but also to think about how to make the most of their continued participation in it.” The syllabus is built around case studies on key episodes in American history, each ending at a pivotal decision that students are left to wrestle with and resolve, both on their own and in the classroom. What better way to convey the uniquely American approach to democratic decision-making than by having students grapple with—and debate—vital historical decisions themselves?

22711 SOCIOLOGY (6 credits; one semester)

22722 HONORS SOCIOLOGY (6 credits; one semester)

Sociology is the study of social life and the social causes of human behavior. Sociologists investigate and seek to understand the structure of groups, institutions, and societies and how people interact within them. Course topics include sociological perspectives, culture, groups, deviance, and social inequalities such as class, gender, and race. The course uses a variety of games, roles plays, videos, readings, and discussions to accomplish our learning goals. An **Honors Sociology** course option is available within the class for students who are interested in exploring topics in greater depth. Students earning honors credit will be expected to extend their learning by reading additional materials and completing a research project with class presentation on a course topic of their choice.

WORLD LANGUAGE

2 Courses Required to Graduate

Mohawk offers two world languages: French and Spanish.

Our graduation requirement is that students complete two courses in the same language.

511 FRENCH I (6 credits; one semester)

5112 HONORS FRENCH I (6 credits; one semester)

French I is offered to students in grades 9-12 who are beginning the study of a language. The course is geared toward learning vocabulary essential to developing basic conversational proficiency. The department works at the entry level to inspire a lifelong interest in the French language and culture. Basic grammatical structures are acquired through consistent practice. At this level, listening and speaking skills receive the most emphasis. Reading and writing are introduced later in the semester. Time spent in the classroom on-task is the most important factor in making satisfactory progress in the French language. To receive Honors credit a student must take ownership of the course material, complete all homework on time, produce at least one project which demonstrates higher order thinking and participate daily. Expectations for all students are that each student work to the best of their ability and contributes to the class by taking interests in the deeper aspects of the culture.

521 FRENCH II (6 credits; one semester)

5314 HONORS FRENCH II (6 credits; one semester)

French II is offered to students who have completed French I. This courses build upon the basic structures and patterns presented in the first year: the receptive skills of listening and reading and the productive skills of speaking and writing. These skills are acquired through consistent practice. At this

level, listening and speaking continue to be emphasized and the skills of reading and writing are further incorporated. Participation in class remains the single most important factor for success. We will explore more culture and Francophone places will be researched to broaden the global understanding of the practical and enjoyable ability to speak French. To receive Honors credit a student must take ownership of the course material, complete all homework on time, produce at least one project which demonstrates higher order thinking and participate daily. Expectations for all students are that each student work to the best of their ability and contributes to the class by taking interests in the deeper aspects of the culture.

531 FRENCH III (6 credits; one semester)

5313 HONORS FRENCH III (6 credits; one semester)

This third year language course is offered to students who have successfully completed a level two course. This course expands upon the basic structure and patterns learned in the previous semesters. The emphasis is on the acquisition of practical vocabulary and the understanding and use of the different verb tenses. The target language is used in discussions and conversation and in grammatical explanations. Although students will be expected and required to do a significant amount of preparatory work outside of class, time spent in class on-task continues to be the single most important factor in learning the French language. French food, music and literature will be incorporated into the curriculum to continue to inspire individual interest in the culture. To receive Honors credit a student must take ownership of the course material, complete all homework on time, produce at least one project which demonstrates higher order thinking and participate daily. Expectations for all students are that each student work to the best of their ability and contributes to the class by taking interests in the deeper aspects of the culture.

541 HONORS FRENCH IV (6 credits, one semester)

Honors French IV is designed to reinforce and expand upon listening, speaking, reading and writing skills, and in general concepts and objectives presented and practiced in prior courses. In addition, authentic Francophone and French materials serve as a point of departure for more sophisticated class discussions, writing assignments and development of vocabulary and critical reading skills. Daily practice in class and focusing on the detailed points of grammar and proper pronunciation are an important part of this course. To receive Honors credit a student must take ownership of the course material, complete all homework on time, produce at least one project which demonstrates higher order thinking and participate daily. Expectations for all students are that each student work to the best of their ability and contributes to the class by taking interests in the deeper aspects of the culture. At level IV all students are expected to do honors level work and to pursue an independent interest within the language and culture.

551 HONORS FRENCH V (6 credits; one semester)

561 HONORS FRENCH VI (6 credits; one semester)

French 5/6 will require self-directed language learners to invest time and energy perfecting the proper pronunciation of the French language. Students are expected to complete challenging work in order to be more precise and skilled in speaking. Students will be taught a strong command of language structures and will be exposed to authentic Francophone film and literature. Students are expected to study independently in addition to taking part in lessons and group projects. The class is advanced and rigorous. Several small field trips will support the cultural component of the curriculum. This class may be an independent study within another level of French or its depending on the scheduling and

availability. To receive Honors credit a student must take ownership of the course material, complete all homework on time, produce at least one project which demonstrates higher order thinking and participate daily. Expectations for all students are that each student work to the best of their ability and contributes to the class by taking interests in the deeper aspects of the culture. At levels V and VI all students are expected to do honors level work. This is a college preparatory class and students will be expected to strive for excellence in the language.

SPANISH

515 SPANISH I (6 credits; one semester)

5152 HONORS SPANISH I (6 credits; one semester)

Spanish I is offered to students in grades 9-12 who are beginning the study of Spanish language and culture. The course objectives involve building the necessary vocabulary base in order to develop skills for listening, reading, writing and speaking in the second language. Students will build their listening and reading skills through a variety of activities. Eventually, when students have a sizeable vocabulary base, they will have the skills to produce language and to communicate in the target language. Time spent in the classroom on-task is the most important factor in making satisfactory progress in Spanish.

In order to receive honors credit, students need to participate in Spanish in class every day. Students should also be able to create stories and define words by using other vocabulary words in Spanish. In addition, students are expected to complete readings and projects on different aspects of hispanic culture.

525 SPANISH II (6 credits; one semester)

5527 HONORS SPANISH II (6 credits; one semester)

These courses build upon the basic structures and patterns acquired in Spanish I. Students continue to increase proficiency in the second language by building their vocabulary base. Students are expected to understand the teacher as s/he speaks mostly in the target language in class. Students are expected to communicate in different formats such as through stories and dialogues. Time spent in the classroom on-task is the most important factor in making satisfactory progress in Spanish. Students continue to explore the geography and culture of Spanish-speaking countries. Students in the Honors course are required to demonstrate self-direction and a commitment to complete more challenging work. In order to receive honors credit, students need to participate in Spanish in class every day. Students should also be able to create stories and define words by using other vocabulary words in Spanish. In addition, students are expected to complete readings and projects on different aspects of hispanic culture.

535 HONORS SPANISH III (6 credits; one semester)

This course builds upon the basic structures and patterns presented in Spanish II. Students must strive to speak only Spanish in class. Students continue to listen to and read stories. Students will be expected to practice conversational strategies in order to develop communicative competence in Spanish. Students will do a variety of activities that will improve their competence in Spanish. These are the vehicle through which they acquire additional vocabulary and grammatical structures. Students will demonstrate proficiency by narrating and writing stories, acting out stories and performing dialogues. Time spent in the classroom on-task is the most important factor in making satisfactory progress in Spanish. Students continue to explore the geography and culture of Spanish-speaking countries.

545 HONORS SPANISH IV (6 credits; one semester)

This course reinforces and expands listening, speaking, reading and writing skills. This course is completely in Spanish. The student is expected to only speak Spanish. In addition, authentic Latin American and Spanish materials serve as a point of departure for more sophisticated class discussions, writing assignments and development of vocabulary and critical reading skills. Time spent in the classroom on-task is the most important factor in making satisfactory progress in Spanish. Students will also continue developing their reading and critical thinking skills in Spanish with more complex materials. There will be an emphasis on honing student's oral skills at this level.

555 HONORS SPANISH V (6 credits; one semester)

565 HONORS SPANISH VI (6 credits; one semester)

Spanish V and VI continue to reinforce and expand listening, speaking, reading and writing skills. However, students are expected to be more precise, to develop better command of the language structures and concepts presented. Culture and authentic Latin American/Spanish materials continue to be the context in which these skills are practiced. Students are expected to speak entirely in Spanish, participate in sustained discussions and complete a significant amount of homework. Real life situations and studies will enhance the curriculum. Students will demonstrate knowledge of the subjects they study through cultural presentations and projects. Students will demonstrate conversational and written competency in Spanish by working independently and collaboratively to solve problems and accomplish goals.

PHYSICAL EDUCATION AND WELLNESS

2 Courses Required to Graduate

1 Course of Health Required to Graduate

Students are expected to take 2 courses of Physical Education over their high school years, and complete the Health Education course.

99100 Introduction to Physical Education (3 Credits; Meets every other day for a semester)

This is an introductory look into Physical Education, where all students can feel comfortable learning and exploring the skills and techniques associated with a wide array of sports and activities. From traditional sports (ie: Basketball, Soccer, Tennis) to leisure time activities (ie: badminton, Kan Jam, and cornhole) this class is designed for students who are hoping to be exposed to a wide range of skills and tactics in a more socially engaging and less competitive PE setting. Students will also be taught on some basic fitness concepts and introductory weight room components. Ideal for 9th and 10th grade students looking for an introductory experience to PE.

99101 Strength and Conditioning: Working Out with a Purpose(3 credits; meets every other day for a semester)

This course will help you develop a personal fitness program and commit to lifestyle choices that will keep you looking and feeling good for a lifetime. This course requires a combination of weight training, cardio and flexibility exercises. This course focuses on physical fitness, beginning with a brief (1)introduction to the weight room and equipment, (2) gathering and analyzing baseline data through various personal fitness assessments, eventually followed by (3) individualized fitness goal setting. Students will engage in activities that will improve both health and skill-related elements of fitness.

Students will learn or review the elements of fitness and exercise using the “F.I.T.T. principle” and use this to work toward and/or achieve their own personal fitness goals. This class is conceptually based and promotes the development and maintenance of personal fitness and problem solving throughout life. At the conclusion of this course students should feel comfortable walking into any weight room or fitness center and have a broader understanding of how to work out with a purpose.

99102 TEAM SPORTS AND RECREATION (3 credits; meets every other day for a semester)

This course is designed to develop a more collaborative and cooperative community through team sports and the use of the “Sports Ed Model”. While working through multiple sports seasons, students will share the roles and responsibilities of “The Coach”, “The Trainer” “The Encourager” and “the Sports Reporter”. While fulfilling each of the “roles” for their team, students will learn the fundamental skills and techniques for participation in a variety of team sports and cooperative activities. The concept of teamwork, cooperation, competition and leadership will be learned through playing a variety of team sports and activities. This is a team centered sports class and students will be working within the same teams for the entire semester. In addition to skill acquisition, the course will focus on how communication and collaboration lead to more productive and cooperative team settings, both in and out of the “sports world”. The course begins with students creating their own team names, game jerseys, chants and more!

99103 Yoga for Today's Teen (3 Credits; Meets every other day for a semester)

This course is designed for all levels and abilities, from a first time Yoga participant, to an “everyday Yogi”. This course is designed to introduce students safely to the basic postures, breathing techniques, and relaxation methods of a variety of different Yoga types and poses. Students will experience the benefits of increased flexibility and improved relaxation techniques to help through their everyday stressors that can arise in all aspects of their lives. Students will be able to work independently at their own pace as well as in small groups while working through the various postures also known as “Asanas”. Students will also be given the opportunity to create and teach their own sequences to each other as desired.

99104 Net and Racket Sports and Games (3 Credits; Meets every other day for a semester)

This course focuses on Sports and Games that require participants to “volley” an implement back and fourth to one another usually over a net, or off of a wall or playing surface, with and without the use of a racket. These activities include, but are not limited to Tennis, Badminton, Pickleball, Ping Pong, Volleyball, and Nitroball. Students will gain a baseline knowledge of the rules, skills and tactics associated with a variety of net and racket sports, while participating in both skills and drills, as well as full games. This will be a somewhat competitive class, but all levels and skills are welcomed!

99291 HEALTH EDUCATION (3 credits; meets every other day for a semester)

This is a required course for 10th grade students.

This course is designed to help students develop the skills they need to make informed and responsible decisions about their personal health. Class discussions, group activities, and projects enable students to look at their health in a multi-faceted way, as more than just the choices they make to keep their bodies physically well. They learn that their health can also be affected by their efforts to strengthen relationships with other people in their lives, by awareness of their interaction with their environment, and by their decision-making skills when faced with risky behavior.

ELECTIVES

Mohawk offers a wide variety of elective courses so that students can experience new subjects and pursue topics that interest them in greater depth.

The Arts

1 course required

All students must fulfill the graduation requirement of taking at least one course in the Arts. The arts enrich our lives in many ways and Mohawk offers students opportunities to explore creative expression in the visual arts, music, and other forms. Elective courses that fulfill the Arts requirement are marked by the ★ symbol.

INTERNSHIPS

88912 MODERN ISSUES IN SUSTAINABLE AGRICULTURE (6 credits)

In this elective course, students will explore sustainable agriculture through a combination of hands-on farming, field work at local farms, interaction with guest presenters, and classroom study. Modern farming will be addressed through the angles of engineering, food systems, and the environmental sciences. The course will be informed by student interest, and there will be opportunities for special projects, internships, and independent studies to extend and enhance the curriculum.

88911 VOCATIONAL INTERNSHIP in the MVP Coffee Shop (3 credits; this course meets every other day for a semester)

In this elective course, students will participate in the daily operation of the MVP Coffee Shop. Students will have the opportunity to select and prepare baked goods and breakfast items to sell in the coffee shop. Students will learn and adhere to basic Serve Safe procedures for handling food, as well as practicing customer service skills. Students will participate in all aspects of running a small business.

MUSIC

844 ★ CONCERT BAND (3 credits; this course meets every other day for a semester and can be repeated)

Concert Band provides students with learning and performance opportunities on wind and percussion instruments. The primary focus is on the development, continuation, and expansion of basic skills begun in middle school band, with an increased focus on individual performance and more challenging repertoire. In addition to large group ensembles, individual growth and achievement are encouraged through participation in regional honor bands and private lessons. Topics and skills covered are the same as in middle school band, but with increased focus on independence and personal responsibility. Additional topics that may be covered include composition, improvisation, and musical analysis.

Prerequisites: MS Band, HS Concert Band, or music teacher recommendation- NOT intended for beginners (3 credits; this course meets every other day for the entire year)

817 ★ CONCERT CHORUS (3 credits; every other day for a semester and can be repeated)

Concert Chorus provides students with learning and performance opportunities in vocal music. The primary focus is on the development, continuation, and expansion of basic skills begun in middle school chorus, with an increased focus on individual performance and more challenging repertoire. In addition to large group ensembles, individual growth and achievement are encouraged through participation in regional honor bands and private lessons. Topics and skills covered are the same as in middle school

chorus, but with increased focus on independence and personal responsibility. Additional topics that may be covered include composition, improvisation, and musical analysis. **No musical experience is required.**

846 ★ BEGINNER GUITAR (3 credits; this course meets every other day for a semester)

Beginner Guitar is designed for students with no previous guitar experience. Students will receive guidance and direction in solving problems related to playing the guitar at a beginning level and will learn many of the different styles, skills and techniques required to become a successful guitarist. Areas of concentration include: correct posture, note reading, aural (listening) skills, flat-picking, singing songs, rhythmic patterns, chord study, finger-picking styles, musical forms, improvisation and performing experiences. No musical experience is required. This course is capped at 11 students, unless you have your own guitar to use for class. **No musical experience is required.**

88191 ★ SELECT CHORUS (1 credit per semester; this course meets one evening every week; it can be repeated)

Students in our award-winning Select Chorus study intermediate and advanced levels of vocal ensemble performance, develop music literacy skills, perform a diverse repertoire of choral music from modern, popular, classical, and world-music traditions, and perform choreographed dances. Select Chorus members share their work in a variety of formal and informal concerts and events, and participation in many events during school, after school, evenings, and weekends may be required. Field trips to music festivals, workshops, master classes, and/or competitions are also offered.

Members of Select Chorus *value and demonstrate personal responsibility, character, cultural understanding, and ethical behavior.* **Prerequisites: MS Chorus, HS Concert Chorus, or teacher recommendation. All students in this course, MUST be enrolled in HS Concert Chorus concurrently for at least one semester and have a successful audition.**

88411 ★ MUSIC THEORY & COMPOSITION (formally music technology) (3 credits; this course meets every day for a semester)

Students will learn how to read, write, analyze, and perform music. Music theory is a class designed for the basic-intermediate musician looking thoroughly understand the components of music and music composition. Students will be able to compose music and understand the guidelines used in music composed by others. In addition, students will work on a series of assignments and projects aimed at developing their literacy on several common and popular music-related programs. Specifically, students will be working with programs such as MixCraft, Fruity Loops, and MuseScore. It is preferred that students can already read music and have been a member of one of our music ensembles before taking this course, but it is not required. **No musical experience is required.**

★ ROCK BAND (3 credits; this course meets every other day for a semester and can be repeated)

Rock Band provides students with learning and performance opportunities on tradition rock instruments (guitar, bass guitar, voice, drumset, keyboard). The primary focus is on the development, continuation, and expansion of basic skills learned previously, with an increased focus on individual performance and more challenging songs. Additional topics that may be covered include composition, improvisation, and musical analysis. **Prerequisites: Beginner guitar or teacher recommendation (this will be used for students that have a primary instrument other than guitar).** Please note this course is NOT intended for beginners.

★ SHOW CHOIR (3 credits; this course meets every other day for an ENTIRE YEAR and can be repeated)

Show choir is an ensemble that combines quality singing and dancing into a single performance. This choral opportunity is intended to broaden students' musical education as well as give students a quality musical experience. Although the membership's musical requirements are high, the foremost qualification is a strong desire to contribute extra time and effort for the overall benefit of the Music Department. **Prerequisites: MS Chorus or HS Concert Chorus**

★ **CONCERT LAB BAND (3 credits; this course meets every other day for a semester)**

The Concert Lab Band is designed to provide students with an introductory experience on band instruments. Lab Band is open to any student with a desire to learn tradition band instruments including flute, clarinet, saxophone, trumpet, baritone, trombone, tuba, or percussion, this is not intended for guitar, piano, or drum set. The goal of this course is to prepare students to perform in the high school concert band. Students with previous band experience, are encouraged to part-take on a new instrument. **No musical experience is required.**

★ **THEATRE TECH (3 credits; this course meets every other day for a semester and can be repeated)**

Technical theatre is a semester course designed for the student interested in the non-performance side of theatre. The class will focus on lighting design and sound system implementation. Students will learn how to work the lighting board, spot lights, create show lighting designs, how to work wireless/wired mics, face mics, set up monitors, learn how to properly work the sound board. This class will prepare students to work with the fall production and spring musical and will provide community theatre opportunities. Student will be required (as part of their grade)to attend tech week after school rehearsals as well as show weekends. **No experience is required.**

MUSIC TEACHING ASSISTANT: By permission of Instructor.

MUSIC INDEPENDENT STUDY: Individualized study in music for students interested in rigorous and in-depth investigation of a particular focus. By permission of Instructor.

TECHNOLOGY

10012 EXPLORING COMPUTER SCIENCE (6 credits; this course meets daily for one semester)

10013 HONORS EXPLORING COMPUTER SCIENCE (6 credits; this course meets daily for one semester)

The Exploring Computer Science course present students with the conceptual underpinnings of computer science through an exploration of human computer interaction, web design, computer programming, data modeling, and 3D printing. While these courses include programming, the focus is on the computational practices associated with doing computer science, rather than just a narrow focus on coding, syntax, or tools. The Exploring Computer Science course teaches students about algorithm design, problem solving, and programming within a context that is relevant to their lives. No previous computer science course is required to take this course; a previous algebra course is recommended.

44352 INTRODUCTION TO ROBOTICS AND ELECTRONICS

44354 HONORS INTRODUCTION TO ROBOTICS AND ELECTRONICS

(6 credits, this course meets daily for one semester)

This course introduces core computer programming logic and engineering reasoning skills through the

design, construction, and operation of autonomous robots. In the first third of the course, students learn about the basic principles of electronics and the design and construction of circuits that use logic gates. The second third of the course focuses on how computer programs, microprocessors, sensors, and actuators can be used to produce a robot that interacts with its environment in a predictable and useful fashion. In the last third of the course, students work with Arduino microcontroller boards and an assortment of components to construct robots from scratch. The course introduces students to the field of electrical engineering and seeks to give students experience and access to the broad set of skills and perspectives called computational thinking. **This course fulfills a Science graduation requirement.** Students enrolled in this course may receive course credit from Greenfield Community College if they complete the application process. Interested students should contact the Guidance Department for assistance in enrolling with GCC.

VISUAL ARTS

Introductory Art Classes:

8101 ★ FOUNDATIONS IN ART AND DESIGN I (3 credits; this course meets every other day)

This is a hands-on, studio-focused course. Students will solve various 2-D visual challenges using principles of design and elements of art including drawing, painting and mixed media. Students will gain exposure to art worlds and movements, with contemporary and multicultural connections. The emphasis will be placed on broadening understanding of art as a visual language, gaining experience with a variety of tools, techniques, and skills and finding your own voice as an artist. Students will further develop their critique skills and visual literacy, and be able to articulate the driving forces behind their choices in both verbal and written formats. **Required Materials: Sketchbook with blank pages that can open flat.**

8102 ★ FOUNDATIONS IN ART AND DESIGN II (3 credits; this course meets every other day, Must complete Prerequisite of Foundations of Art and Design 1 or Art-glish)

This is an extension of the learning that begins in FOUNDATIONS of ART & DESIGN 1. Students will continue to expand on 2-D skills as well as move into solving various 3-D visual challenges. In addition to drawing and painting, students will potentially use paper-mache, plaster, the artform of assemblage, clay, and wire forms. Students will gain exposure to major ideas in sculpture with contemporary and historical connections. The emphasis will be placed on gaining facility with new materials while also composing art that is personal and meaningful. Studio work is organized around these 3 concepts in sculpture: a) What is form and how do we design in 3-D space? b) various additive and subtractive techniques c) using sculpture to express a message or narrative. Students will further develop their critique skills and individual creative voice, and be able to articulate the driving forces behind their choices in both verbal and written formats. **Required Materials: Sketchbook with blank pages that can open flat.**

Intermediate Art Classes:

8106 ★ INTERMEDIATE ART & DESIGN 3 (3 credits; meets every other day)

Prerequisite: Foundations of Art and Design 1 and 2 or Equivalent 6 credits of Visual Art

This course builds upon prior learning in the Foundations courses and deepens study of technique in various media such as drawing, watercolor and acrylic paint, printmaking, and multi-media art. Students also practice training their focus on thematic projects that explore art as a visual language, connected to our experiences. We will create in both 2-D and 3-D using a variety of materials. The course will follow 4 learning sequences: a) foundational skills for advanced drawing

b) Stylistic Explorations in Painting c) Global Cultural Production d) Independent Project. **Required Materials: Sketchbook with blank pages that can open flat.**

8107 ★ HIKING & NATURE BASED ART: (3 credits, meets every other day)

Prerequisite: 1 High School Level Art Course or Instructor Permission

Calling environmentalists, artists and anyone who enjoys being outside and wants to learn more about how art and the outdoors are connected. One of our greatest resources in West County is our land. We will spend time getting to know the earth below our feet and experience the many inspiring aspects of the natural environment on our own campus and on local hiking trips meant to awaken our senses and provide inspiration for our work. The course will follow 4 learning sequences: a) Foundational Skills b) Process Work c) Realism, Observation, and Abstraction Techniques d) Personal/Global Themes and Narrative. We will also look at art from today and the past to understand how artists relate to nature and the environment through their work. **Required Materials: Sturdy Spiral Bound Sketchbook (provided) with 30 pages and hiking shoes or boots and outerwear for hiking in cold or wet conditions.**

8114 ★ CONTENT CREATORS (3 credits, meets every other day)

Prerequisite: 1-2 High School Level Art Classes or Instructor Permission)

All careers today involve some type of interaction with digital images, the internet and social media. Equip yourself with some basic photography and design skills that will help you understand how and why original content is created and shared. This is a survey course designed to expose students to a variety of topics and skills relevant to creating online content, including traditional darkroom photography-- skills that have led us to the digital photography of today. In this course students learn to define and develop their own areas of interest and apply that thinking as a critical and creative voice in an online space. Who is this course for? Artists, Musicians, Writers and other Creatives, Social Media Creators, Entrepreneurs, Enthusiasts of any kind! The course will be idea-centered with camera, computer-based and hands-on projects involving:

- Traditional hands-on art making
- Design Principles
- Graphic Design and Marketing
- Digital and non-digital Photography and Imaging

CERAMICS (3 credits meets every other day)

Prerequisite: 1-2 High School Level Art Classes

Learn how to make functional and sculptural pieces out of clay! We will use handbuilding techniques to create various vessels and art pieces while learning how to craft in the medium of clay. We will build using pinch pot, coil, slab and other hand-building technique. Our class will travel to Molly Cantor's studio in Buckland to fire and glaze our work. Come try this fun and ancient artform and learn how create original pieces you can use everyday. Students will be responsible for a course materials fee of \$30 (sliding scale available).

Advanced Art Classes:

8850 ART TEACHING ASSISTANT: By permission of Instructor.

9810 ART INDEPENDENT STUDY: Individualized study in visual art for students interested in rigorous and in-depth investigation of a particular thematic focus. By permission of Instructor.

81001 ★ ADVANCED STUDIO/ CONTEMPORARY ART (3 credits; this course meets every other day)

This advanced course is designed to explore the issues and problems that drive today's artists and YOU are the main subject! How do artists share their story and perspective? How do artists respond to the world around them? How are artists part of articulating a new vision for the future? How are artists involved in social, political, environmental, and global issues? How can we, as image makers harness the possibilities of art to engage with matters of importance to us personally? What does it take to be a critically engaged artist? These are some of the questions we will pose and explore as we learn about art through the lens of sustained focused on a theme of importance. Over the semester you will design and create a collection of artwork based on **your own** contemporary ideas and creative drives. This course requires students conduct independent research, participate fully in all discussions, and be able to hold respectful dialogue (something we will actively practice). Students will further develop their critique skills and individual creative voice, and be able to articulate the driving forces behind their choices in both verbal and written formats. **Required Materials: Sketchbook with blank pages that can open flat.**

WOODWORKING

Overview

The Mohawk Woodworking Program offers students authentic learning by doing real tasks with professional tools and quality materials. Two primary pathways are available in the program. The Trade Pathway teaches students woodworking practices that develop professional level woodworking ability. The Arts Pathway uses woodworking to explore art, music and design. The starting place for both Pathways is Beginning Woodshop.

803 ★ Beginning Woodshop (3 credits; this course meets every other day for a semester)

Students learn fundamental woodworking skills, with an emphasis on safety in the shop. Topics covered include the use of hand tools, portable power tools and major woodshop machinery such as the planer, table saw and miter saw. Students will build skill and confidence using these tools in a series of introductory woodworking projects. Creativity, problem solving and quality craftsmanship are all encouraged. Graduates of this class can go on to pursue the Mohawk Woodworking Program's Trade and Arts Pathways.

8806 ★ Cabinet Making (3 credits; this course meets every other day for a semester)

This Trade Pathway course teaches more challenging woodworking techniques such as mortise and tenon joinery, biscuit joining and routing while building a traditional style cabinet with drawers. Students will learn to work from more complex plans, improve problem-solving skills, and develop an ethic of stewardship in the shop. The course emphasizes accuracy, quality and beauty in the creation of a cabinet designed to last for generations. **Prerequisite: Beginning Woodshop.**

8808 ★ Stringed Instrument Making (3 credits; this course meets every other day for a semester)

This Arts Pathway course teaches the fundamentals of stringed instrument construction while building a dulcimer-tuned three string instrument called a "strumstick." Constructed of quality hard and softwoods with a solid wood soundboard and fretted neck, this instrument can be accurately tuned and blends well with other common instruments, creating great "jam" potential. Students will combine hand and power tools to develop skills such as neck, bridge and tailpiece construction and fret-cutting. The course includes an exploration of acoustics and basic instruction in playing a stringed instrument. **Prerequisite: Beginning Woodshop.**

805 ★ Advanced Woodshop (3 credits; this course meets every other day for a semester)

Students interested in either the Arts or Trade Pathways study advanced woodworking topics through self-directed independent projects under the instructor's supervision. There is an emphasis on design, creative expression and aesthetics, as well as accuracy, quality and attention to detail. Teamwork and cooperation are encouraged, as is increased independence in problem solving. Skills developed may include woodburning, scrollsaw work and advanced routing techniques, among others. Projects completed by recent Advanced Woodshop students include shelves, tables, chairs, musical instruments, cabinets, sculptures and hardwood boxes. Students may take Advanced Woodshop multiple times for credit. **Prerequisite Beginning Woodshop plus one Trade or Arts Pathway course. (For students in grades 10-12)**

YEARBOOK

821 YEARBOOK (3 credits; this course meets every other day for a semester)

Yearbook is a production -based elective course that creates the school's yearbook. Because the staff is solely responsible for the content, design, layout, and sale of the book, students who choose to be a part of this business must ensure that it runs efficiently and effectively. Staffers must be cooperative, punctual, professional, creative, and productive. Students are responsible for taking digital photos, conducting interviews, managing clerical operations, making announcements, maintaining signage, and composing, designing, and editing all elements of text, graphic art, and digital photography layouts. This course requires students to be available outside of regular class hours to attend sporting events, student activities, etc. Students are expected to be organized, motivated, and possess strong reading and writing skills upon entering the class.