# **New York Mills UFSD**

# Course Selection Guide

**Academic Planning Information** 

Grades 9-12 2024-2025 School Year

# **Graduation Requirements and Course Requests**

Name	Year of Graduation

	8 <sup>th</sup>	9 <sup>th</sup> 10 <sup>th</sup>		11 <sup>th</sup>	12 <sup>th</sup>	
	Grade	Grade	Grade	Grade	Grade	
1		English 9	English 10	English 11	English 12 AP	
2		Global Studies 9	Global Studies 10	U.S. History  □AP	Economics Gov't	
3		Earth Science	Living Environment	Science		
4		Math	Math	Math		
5		PE Lab	PE Lab	PE	PE	
6		Art or Music	Health			
7		Intro to Computers				
8	LOTE Check- Point A	LOTE	LOTE			
9		Lunch	Lunch	Lunch	Lunch	
		-				

Graduation	
Requirements	
Subject Area	Credit
English 9	1
English 10	1
English 11	1
English 12	1
Global 9	1
Global 10	1
US History	1
PIG	.5
Economics	.5
Math 1 ( )	1
Math 2 (	1
Math 3 (	1
,	
Earth Science	1
Living Enviro	1
Science 3 (	1
Health	.5
Intro to Computers	1
· · · · · · · · · · · · · · · · · · ·	
Art/Music	.5
Art/Music	.5
LOTE	1
LOTE 2– AR	1
LOTE 3- AR	1
Phys Ed 9	.5
Phys Ed 10	.5
Phys Ed 11	.5
Phys Ed 12	.5
•	
Other	
Other	
Other	
Other	
Total	22

# **Graduation Requirements and Course Requests**

Name	Year of Graduation

D	
Regents Exam	Score
For Regents or	
Local Exam	
Algebra	
Science 1	
Global Studies	
US History	
English	v
Additional for	,
Advanced	
Regents	
Geometry	
Science 2 (one	
must be LE)	4
Algebra II CC	κ.
LOTE CP B	
Other Regents	
Exams (may	
substitute for	
exams above	
except LE)	
Chemistry	
Physics	

## **Diploma/Examination/Credential Requirements**

**New York State Credit Requirements** 

	Local Diploma*	Regents Diploma	Regents Diploma with Advanced Designation
English	4 Credits	4 Credits	4 Credits
Social Studies	4 Credits	4 Credits	4 Credits
Science	3 Credits	3 Credits	3 Credits
Math	3 Credits	3 Credits	3 Credits
Languages Other than	1 Credit	1 Credit	3 Credits
English (LOTE) Art/Music	1 Credit	1 Credit	1 Credit
Health	½ Credit	½ Credit	½ Credit
Physical Education	2 Credits	2 Credits	2 Credits
Other Courses/Electives (All students must take Introduction To Computers)	3.5+ Credits	3.5+ Credits	1.5+ Credits
Minimum Total Credits	22	22	22

Regents Examination Requirements (Students must score 65 or above on the required Regents Exams\*)

	Local Diploma*	Regents Diploma	Regents Diploma with Advanced Designation
English	<ul> <li>Regents English</li> </ul>	• Regents English	<ul> <li>Regents English</li> </ul>
Social Studies	<ul><li>Global History &amp; Geography</li><li>U.S. History and Government</li></ul>	<ul><li>Global History &amp; Geography</li><li>United States History and Government</li></ul>	<ul><li>Global History &amp; Geography</li><li>United States History and Government</li></ul>
Science	• 1 Regents Exam	• 1 Regents Exam	• 2 Regents Exams
Math	• 1 Regents Exam	• 1 Regents Exam	<ul><li>Algebra</li><li>Geometry</li><li>Algebra 2/Trigonometry</li></ul>
Languages Other than English (LOTE)	✓ Checkpoint A exam is required for credit if prior to 9 <sup>th</sup> grade	✓ Checkpoint A exam is required if prior to 9 <sup>th</sup> grade	• Regents/Checkpoint B Exam
Minimum Exams	5 exams	5 exams	9 exams

All seniors must also complete a research paper in order to be eligible for graduation.

(Please see reverse for additional credential information)

## New York Mills Course Offerings 2024-2025

Course	Grade	Credits	Other
English			Must earn 4 credits
English 9	9	1.0	Required
English 10	10	1.0	Required
English 11 CC	11	1.0	Required + exam
English 12 DC	12	1.0	Required
	,		
Fine Arts			Must earn one credit
Studio Art IA	9-12	.5	Fall
Studio Art IB	9-12	.5	Spring Prerequisite: Studio Art IA
Advanced Arti	10-12	1	Prerequisite: Studio Art IA & IB
Advanced Art II	11-12	1	Teacher recommendation, Advanced Art I
High School Chorus	9-12	1	
High School Band	9-12	1	
High School Chorus .5	9-12	.5	Must also take HS Band .5
High School Band .5	9-12	.5	Must also take HS Chorus .5
Health			Must earn .5 credits
Health 9-12	9-12	.5	Required
Languages Other Than English (LOTE)			Must earn 1 credit; 3 credits for Adv Regents
French II	9-12	1	
French III	10-12	1	
French 191 & 192 DC	11-12	.5/.5	Fall/Spring
Spanish II	9-12	1	
Spanish III	10-12	1	
Spanish 191 & 191 DC	11-12	.5/.5	Fall/Spring
American Sign Language I	9-12	1	Distance Learning
,			
Math			Must earn 3 credits
Pre-Algebra	9	1	Teacher recommendation
Algebra I CC	9	1	
Geometry CC	10-12	1	
Algebra II CC	11-12	1	Pre-requisite: Geo CC
Statistics DC	11-12	1	
Pre-Calculus DC	11-12	1	Pre-requisite: Alg II
AP Calculus AB	12	1	Pre-requisite: Pre-Calculus, teacher recommendation
Foundations of Physical Computing	11-12	1	Math or Science Credit
(Robotics)			
4			
9			
	-		

## New York Mills Course Offerings 2024-2025

Science			Must earn 3 credits
Earth Science R	9	1	
Living Environment R	10	1	Required
Applied Physical Science	11-12	1	'
Chemistry R	11-12	1	
Physics R	12	1	Recommended Prerequisite: Algebra II
Biology 101/102 Principles of Bio DC	12	.5/.5	η
Foundations of Physical Computing	11-12	1	Math or Science Credit
(Robotics)			
Social Studies/History			Must earn 4 credits
Global Studies 9	9	1	Required
Global Studies 10	10	1	Must take 1 GS 10 class
Global Studies 10DC	10	1	Must take 1 GC 10 class
US History and Government	11	1	Must take 1 US History class
U.S. History DC	11	1	Must take 1 US History class
Participation in Government	12	.5	Required. May take as a junior
Economics	12	.5	Required. May take as a junior
Technology/Business			,
Introduction to Computers	9-12	1	Required by NYM
Accounting I DC	10-12	1	
Accounting II	11-12	1	Prerequisite: Accounting I
BM 108 Personal Finance DC	12	.5	Fall
BM 120 Principles of Marketing DC	12	.5	Spring
DDP	10-12	1	Can be used as Fine Art credit
Other Electives	11.10		
Senior Seminar	11-12	.5	Full-year, every-other-day
Psychology DC	10-12	.5	Distance Learning
Sociology DC	10-12	.5	Distance Learning
Physical Education	<del> </del>		Must enroll each year and earn 2 credits
Physical Education 9-12	9-12	.5	ividst ein on each year and earn 2 credits
ritysical Education 9-12	9-12	.3	
Additional Considerations			Please see Mrs. Ellis for details
New Visions	12	4	
BOCES CTE Programs	11-12	4	*Most programs are 2-year, beginning in 11th grade
MiTech – BOCES CTEC	9, 10	4	, , , , , , , , , , , , , , , , , , , ,
R=Regents			
CC=Common Core (Regents)			
DC=Dual Credit		8	
AP=Advanced Placement			
			er .

## Other College Credit Opportunities

#### College Classes Not Taught on the New York Mills Campus

 Career and Technology Center Credits – Students enrolled in CTE programs, including New Visions, will have the opportunity to enroll in dual credit courses through MVCC if they meet certain requirements. These include IS101(Computer Applications and Concepts), BM108(Personal Finance), BM100(Intro to Business), and BM120(Principles of Marketing).

The CTEC also has many articulation agreements with a number of colleges. Please see your CTE School Counselor or instructor for more information.

The following options require students to take their coursework on a college campus. Please keep in mind the following:

- · Transportation is the responsibility of the student.
- · Coursework must be approved by the high school principal.

Please see the counseling office for details on the parameters and requirements for these courses.

- MVCC College Connection-High school seniors who qualify are eligible to take courses on a part-time basis
  on the MVCC campus during fall, spring and summer semesters. There are a limited number of slots available.
  The MVCC placement test is required and scores will indicate the courses for which you qualify. This is a
  scholarship program; there is no cost for the courses but the student is responsible for books and activity,
  technology and other additional fees.
  - o Please note that registration for the fall semester generally begins in April and is due late June or early July and registration for the spring semester generally begins in November and ends in December. Registration dates and deadlines for summer courses vary depending upon which summer session you wish to attend. Please plan well in advance if you wish to take classes to ensure that all requirements, including completion of the placement test, are met in order to enroll in courses. Please visit the counseling office or see our website for more accurate dates.
- **Utica College Dual Enrollment** High school seniors who qualify will be allowed to take up to two classes per semester at a reduced rate per class plus books and fees. Students must complete an application and be approved by both the high school and college. Registration for the fall generally takes place later spring.
- **College Bridging** High school seniors who qualify may take courses at MVCC as a part-time student. Students are responsible for all costs associated with these classes, including tuition, fees and books.

## **BOCES Career and Technical Education Programs**

BOCES offers a variety of Career and Technical Education programs, most beginning in the junior year. Juniors spend the morning on the New York Mills campus for their English 11, US History, and Physical Education coursework. Students may also have room in their schedules for an elective. The afternoon is spent at the CTEC campus on Middle Settlement Road in the program of their choosing. Students earn 1 math credit, 1 science credit and 1 English 12 credit (if student chooses not to take English 12 dual credit offered at New York Mills) at the completion of two years of the program.

#### Programs offered include:

- Advertising Design & Multimedia Productions
- Animal Science (One-year program-ELA, Science Credits)
- Auto Body Repair
- Automotive Technology
- Conservation
- Construction Trades
- Cosmetology
- Criminal Justice
- Culinary Arts
- Early Childhood Education
- Electricity
- Emerging Technology & Cyber Security
- Nursing Assistant (One-year program, also .5 Health credit)
- Outdoor Power Equipment
- Welding

## OHM BOCES CTEC MiTech Programs

- Students may enroll for one year (9th or 10th) or two (9th and 10th)
- Students will take courses in AM (Homeroom- First Half of Period 5) at New York Mills and in the PM (Second Half of Period Five-Dismissal) at OHM BOCES

# MiTech 9 Units of Study

- ADMP, Photoshop
- Animal Science, Zoonotics & Poster Art
- Carpentry Using, Tools & Small Wood Projects
- Conservation, Tree ID & Maple Collection
- Culinary, Apple Cider, Pancakes & Cookies
- Small Engines, Tune Ups, Basic Maintenance & 4 Stroke Operation

ACADEMICS: Pre-Algebra, ELA 9 & DDP (.5 credit)

## MiTech 10 Units of Study

- Automotive, Brakes, Oil & Tires
- Conservation, Maple Collection
- Construction, Building a House
- Criminal Justice, Car Tickets & Small Investigation
- Culinary, Baking & Producing Maple Cream
- Electricity, Wiring
- Emerging Technologies, 3D Printing & Computer Repair
- Welding, Three Different Types of Welds

ACADEMICS: Algebra or Geometry, ELA 10 & DDP (.5 credit)

## **Guidelines for Successful Enrollment**

#### THE STUDENT SHOULD:

- Be able to read and write at grade level.
- Be able to process grade level algebra and/or geometry.
  - Be able to get along with peers and adults.
- Be able to communicate effectively verbally and in writing.
- Have hand-eye coordination that allows student to work with machinery.
  - Demonstrate the ability to behave safely and follow directions.
    - Be willing to complete hands-on lab work on a daily basis.
      - Be willing to complete core academic subjects.

## **Regional Program for Excellence**

Regional Program for Excellence (RPE) is an internship program coordinated through SABA (School and Business Alliance) in which qualified students spend at least 72-75 total hours in a workplace setting in a career area of their choosing, under the mentorship of professionals. Students have a choice of completing these hours during the summer or school year. Along with other requirements, students must be seniors with a minimum B+ (88+) average. As most internships take place for a half-day during the school week, interested students must be able to make up any missed work

Representatives from RPE will meet with juniors in the late winter/early spring to discuss the program and application process.

Why participate in an internship?

- Connecting classroom knowledge to real life is invaluable as you plan for your future.
- Skills and knowledge about careers and the work environment such as communication, leadership, and problem-solving are acquired through experience in a workplace.
- They can help to build your resume and college application.
- Networking may result in other job opportunities in the future. Letters of recommendation from a mentor can be valuable.
- Internships may help you to learn not only what you want to do, but also what you don't want to do!

## English

All students must earn four units of credit in English and pass the Regents Exam in English Language Arts (ELA) (Common Core).

## **English 9**

1 Credit

English Language Arts 9 follows the New York State educational standards. This course is designed to teach grammar, vocabulary, reading, and writing skills. Students will read a variety of literary texts that range from short stories and poetry to classic novels and Shakespeare. In conjunction with all literary assignments, the students will prepare for the New York State Regents Examination taken in the students' junior year by completing a variety of assessments.

## **English 10**

1 Credit

English 10 continues the development of the students' basic English skills, following the New York State English Language Arts Learning Standards. Special emphasis is placed on reading fluency and students' development through the study of literature in the following genres: short stories, novels, plays, and poems. The reading of non-fiction material is also stressed. The writing program (AIS) is closely related to the readings. It is a chance for the students to ask questions and receive one on one direction to strengthen their writing fluency and enhance comprehension for all the strategies taught. Description, exposition, narration, persuasion and extensive practice with the 11th grade regent's tasks are examples of the major types of writing produced. Vocabulary development is heavily emphasized, through literature, writing, and practice exercises to strengthen and increase scores on the PSAT and SAT tests.

## **English 11CC**

1 Credit

English 11 Common Core is a course that intermixes contemporary and classic literature with college and Regents preparatory writing tasks to ensure student understanding. A heavy emphasis is placed on the stylistic functions of language as examined in both informational and fictional texts. Similarly, students will study the art of persuasion in writing, learning to cohesively synthesize a multitude of texts to prove a thesis. In addition to structured essays, close readings, and short written responses, students will complete a variety of classroom exercises to familiarize themselves with the SAT, hone proper grammar and usage skills, and expand their vocabulary. A New York State Common Core Regents examination serves as the culminating assessment, testing comprehension in literacy, textual analysis, and argumentative writing skills. A passing score on both the exam and the course is mandatory for high school graduation.

## English 12 DC

1 Credit

MVCC Dual Credit – EN101 English Composition EN102 Ideas and Values in Literature EN150 Public Speaking

English 12 DC is divided into three units of study: literature, composition, and public speaking. This course seeks to develop each student's intellectual skills of interpretation and analysis, to continue the advancement of quality writing, and to provide students with the skills and strategies that apply to the planning, preparation, and presentation stages of any type of speech. Content includes literature, composition, and public speaking.

\*\*\*The research paper is the longest and most involved written assignment, spanning several weeks. Each student is required to write a paper and will be considered ineligible for graduation until a paper is submitted, as the student's English 12 average will be considered an Incomplete until the comprehensive assignment has been finalized and submitted.

## **Fine Arts**

All students must earn 1 unit of credit in music, art, or DDP (see course description under Technology/Business).

#### Studio Art IA

½ Credit

Offered in the fall

This class is the first half of the Studio Art course. It is an introduction to art mediums, occupations, artists, the Elements and Principles of art, and art history. Throughout the year students have a chance to create works of art using pencil, colored pencil, paint, clay, and a variety of other materials. They learn how art has impacted history and continues to play a major role in today's society. They will learn the basics about how art is created using the Elements of Art and their imaginations. Students will also learn about artists who have shaped our image of the world. This course teaches the students what they need to know to feel comfortable at taking creative chances and thinking "outside the box" while inside a classroom.

#### Studio Art IB

½ Credit

Offered in the spring

This class is the second half of the Studio Art course. Please see above for description.

#### Advanced Art I

1 Credit

This course has been designed to expand on what was learned in Basic Studio Art. Students have opportunities to paint, draw, and sculpt, as well as create unique craft items. Some of the projects include painting on glass as well as on canvas, creating clay vessels, fabric crafts, and more! Student will continue to develop their skills and use of material. The structure of the class is more open to allow for a variety of projects to be going on simultaneously and extra time for creative exploration and sharing.

Prerequisite: Successful completion of Studio Art IA and IB

#### **Advanced Art II DC**

1 Credit

This course will build on our understanding of the connections between Elements of Art and the Principles of Design. This includes an in-depth exploration of various color schemes and developing more complex and layered compositions which will reflect individual student artistic interests and medium explorations as well as mastery of visual language. Utilizing the intersections of the Elements of Art and the Principles of Design such as form and shape, texture and pattern, unity and balance, students will develop and broaden their understanding of composition, aesthetics, and critical analysis. The course will explore a variety of media, processes, and techniques to provide a broad view of visual problem solving.

Prerequisite: Successful completion of Advanced Art I, teacher recommendation

## **High School Chorus**

1 Credit

High School Chorus is a performance group focused on developing successful musicians on both the group and individual levels. The class meets daily and welcomes all vocalists at any level, beginner or advanced. Attendance is expected at both concerts as well as any other performing opportunities throughout the year. Students will be given additional choral performing opportunities throughout the year as well.

## **High School Band**

1 Credit

High School Band is a performance group that meets daily. Students are also required to attend lessons once per week. Attendance is expected for Spirit Band, the Memorial Day Parade and the Winter and Spring Concerts. Opportunities for additional band-based activities are also available.

## Health

All students must earn .5 units of credit in Health.

## Health 9/12

1/2 Credits

This 20-week course meets the New York State requirement for Health Education. Content topic areas cover mental health, family and social health, drugs, alcohol, tobacco, diseases, disorders, growth development (including effects of personal care, nutrition, exercise and fitness), human sexuality, safety and first aid. This course is generally taken in 10<sup>th</sup> grade.

## **Languages Other Than English (LOTE)**

All students must earn 1 unit of LOTE credit.

Students pursuing an Advanced Regents diploma must earn 3 units of credit and earn a 65 or higher on the Checkpoint B exam.

## French 191 (fall) & 192 (spring)

1 Credit (1/2 credit each)

MVCC Dual Credit – FR191, FR192 (3 credits each)

FR 191/192 is a college-credit bearing course offered through Mohawk Valley Community College. Successful completion of both courses with a grade of C or better results in the earning of six college credits, free of charge. There is no tuition cost, nor is there a need to purchase textbooks.

This course is designed to be an overview of grammatical concepts introduced in the first four years of French, with the intent of mastering the advanced concepts introduced in French III. New grammatical

concepts are introduced with the use of cultural context such as history, geography, literature, music, arts and films.

The FR 191 portion culminates in a final exam administered in January, and FR 192 culminates in a final exam administered in June. Successful completion of both the course and final exams are required to earn the six college credits.

Prerequisite: Successful completion of French III and the Checkpoint B Exam

#### Spanish II

1 Credit

This course continues the sequence of the Spanish Regents track. Students begin to prepare for Checkpoint B of the New York State Syllabus. Emphasis is on the expansion of vocabulary, the formation and use of many verb tenses, and complex grammatical structures.

Students learn how to express themselves and inquire about other topics by using more complex grammatical structures in both verbal and written forms. Students also expand their reading and listening comprehension skills, and are given the opportunity to express themselves more thoroughly in writing. More specific culture topics and geography of Spanish-speaking countries are presented and reviewed throughout the year. The emphasis of this course is on the totality of verb usage in the language.

Prerequisite: Successful completion of Spanish IB

## Spanish III

1 Credit

This third year of Foreign Language study includes an intense focus on implementing and weaving together the skills of listening, speaking, reading and writing. This third year also stresses a higher level of testing which includes comprehension and performance with each of the skills. The third year includes a string focus on writing and translating and using circumlocution for expression in the target language. This course prepares students for further study in Spanish and for taking the Spanish Checkpoint B Exam in June.

Prerequisite: Successful completion of Spanish II

## Spanish 191 (fall) & 192 (spring) DC

1 Credit (1/2 credit each)

MVCC Dual Credit – SP191, SP192 (3 credits each)

This course is designed to be an overview of grammatical concepts introduced in the first four years of Spanish. The grammar is embedded in various themes, historical events, and significant Hispanic figures. They are studied using literature, film, music and other authentic resources. Students are expected to practice and improve their reading, writing, listening and speaking skills throughout the course.

The SP 191 portion culminates in a final exam administered in January, and SP 192 culminates in a final exam administered in June. Successful completion of both the course and final exams are required to earn the six college credits.

Prerequisite: Successful completion of Spanish III and the Checkpoint B Exam

## American Sign Language I

1 Credit

This course has been designed to satisfy the New York State Regents requirement for foreign language credit. ASL I is the first of a series of three sequential courses that will teach you introductory level vocabulary, basic grammatical structure and the cultural background needed to communicate with deaf individuals. Information that will be covered will include the language functions; asking for and giving information, making requests, giving directions, agreeing and disagreeing, expressing likes and dislikes as well as many other basic skills required to communicate on a rudimentary level. The multimedia exposure students experience in this class will help them better understand the deaf culture. ASL I offers students a variety of experiences that will increase their awareness of the world around them.

## Math

All students must earn 3 units of credit in math and pass one math Regents exam.

The third unit of study may be satisfied through successful completion of a BOCES CTE program, depending on the program.

Students pursuing a Regents Diploma with Advanced Designation must earn a 65 or higher on the Algebra, Geometry, and Algebra II exams.

Algebra I CC 1 Credit

Common Core Algebra 1 is a Regents course that is offered to students their first year of high school. Topics in the course include the real number system, linear expressions, equations and inequalities, graphing in the coordinate plane, domain and range, functions, systems, radicals, exponents, polynomials, quadratics, statistics, and modeling with functions. The course concludes with review for the Common Core Algebra 1 exam. In this course students are asked to problem solve and think critically in a variety of different settings. Students work collaboratively to solve problems, and apply math skills to real world scenarios. Students' mathematical writing

and verbal communication skills are incorporated in the curriculum throughout the year.

Accelerated students will take this course as 8th graders.

## Pre-Algebra

1 Credit

This is a full year course that is designed to be taken as a preparatory course for Algebra ICC. The course concentrates on linear equations, linear functions, linear inequalities and quadratic equations. There is not a Regents exam for this course.

## **Geometry CC**

1 Credit

Common Core Geometry is a Regents course that is offered to students their second year of high school. Topics in the course include congruence, similarity, right triangle trigonometry, circles, expressing geometric properties with equations, geometric measurements and dimensions, and modeling with geometry. The course concludes with review for the Common Core Geometry Regents. In this course students are asked to problem solve and think critically in a variety of different settings. Students work collaboratively to solve problems, and apply math skills to real world scenarios. Students' mathematical writing and verbal communication skills are incorporated in the curriculum throughout the year. *Prerequisite: Algebra ICC or Algebra IACC and IBCC* 

## Algebra II CC

1 Credit

The topics included in this course include number quantity (real and complex number systems), algebra (equations, inequalities), functions (linear, quadratic, exponential and trigonometric) statistics and probability (data, rules of probability and conditional probability). The course will focus more in depth on understanding the meaning of polynomial functions and extending those meanings to other functions and applications.

Prerequisite: Geometry

#### **Pre-Calculus DC**

1 Credit

This is an MVCC dual-credit course. Students will take the MVCC placement test at the beginning of the course and will be eligible for college credit based on the score on that test. Credit potentially earned is MA150-Pre-Calculus (3 credits).

This is a pre-calculus course designed for students who will be taking mathematics in college or are on track to take AP Calculus through the school. The course includes the study of polynomial functions with graphing techniques. Algebraic topics covered in previous courses, such as exponential and logarithmic functions, complex numbers and inequalities are expanded through the introduction of real-life application, time value of money, linear systems, vectors and some calculus. additional topics that are introduced to students for the first time are matrices and their applications, advanced statistics including series and sequence.

Prerequisite: Algebra II

#### Statistics DC

1 Credit

This is an MVCC Dual-credit course. Students will take the MVCC placement test at the beginning of the course and will be eligible for credit based on the score on that test. Credit potentially earned is MA 110-Elementary Statistics (3 credits).

This course will be an introduction to the study of statistics including the collection, organization and interpretation of data. Probability distributions such as Binomial, Poisson and Geometric Distributions will be looked at in detail and the Normal Distribution will be used in various applications such as determining confidence intervals for population statistics and Hypothesis Testing for supporting claims made about a population statistics.

#### **AP Calculus AB**

1 Credit

1 Credit

This course includes review of fundamental knowledge involving functions and their graphs. The idea of limits is introduced and used to develop the concept of the derivative and how the derivative relates to the slope of a graph and rates of change. Techniques of differentiation and their applications are also shown. The integral is the second major topic and as the antiderivative relates functions and their graphs to the area enclosed by the graph. Additional topics include unique functions, such as trigonometric, exponential and logarithmic functions with differentiation and integration, and slope fields. Each student has the option and is encouraged to take the AP exam in May.

Prerequisite: Pre-Calculus, teacher recommendation

## **Foundations of Physical Computing** (Robotics)

Computer science is very important to the success of our students in a digital, interconnected world. Computer science is a discrete academic discipline, but it is also embedded in virtually every area of academic study, since computer literacy, data analysis, and digital citizenship have become essential skills in most disciplines. Students need to be met where they are developmentally and this course allows students to enter and be successful, regardless of any prior computer science knowledge. Students who have had the opportunity to practice computational thinking, block coding, or other online computer course work, will find that they can grow with the open-ended challenges as well as the ability to write code more than one way.

This course covers computer science skills while it applies science, mathematics, and language arts. The lessons integrate the subjects seamlessly and include unplugged activities, 21st Century skills, and a focus on careers. Foundations of Physical Computing offers a progression for students to find instant success then be pushed to their maximum potential in open-ended challenges in every unit. Reflecting on their skills, students create a plan for entering into a career field after they have explored all 16 career pathways. Ending the course is a culminating experience, which includes

researching and solving a real-world problem and then presenting the solution to the class.

\*Math or Science Credit

# Foundations of Physical Computing 2 (Robotics) 1 Credit

This course is a continuation of Robotics I.

\*Math or Science Credit

#### **Consumer Math**

1 Credit

Consumer Math uses basic math skills in real life situations such as banking, college costs, purchasing, budgeting, credit card usage, investing, and much more.

## **Other Electives**

Students must have a total of 22 credits for graduation. Electives are included and count toward the total.

#### **Senior Seminar**

½ Credit

Senior Seminar is an elective course being offered to 12<sup>th</sup> grade students. The focus of the class is to help students plan and prepare for life after high school. The course will align with the New York State initiatives of college and career ready. Students will be equipped with the skills, tools and knowledge to enter the next phase of their lives. Students will participate in exploring careers, researching colleges, job seeking skills, personal finance, communication skills, team building, health, safety, nutrition and wellness. The senior seminar class will be working within the New York Mills community on service projects and volunteering with the school community as part of the course.

## Psychology DC

½ Credit

MVCC Dual Credit— PSY101 — Introduction to General Psychology (3 credits)

General Psychology is a course that gives students enrolled in the class an opportunity to be exposed to the rigors of a college level curriculum while receiving high school credit. General psychology is an overview of the subject of psychology, including some of the basic concepts of the discipline and major aspects of human behavior and functioning, such as brain and sensory functioning, emotion, learning, intelligence, motivation, personality, development, and abnormal behavior. This course is taught through Distance Learning.

## **Sociology DC**

½ Credit

MVCC dual credits – SO101 – Introduction to Sociology (3 credits)

Introduction to Sociology is a course offered through Mohawk Valley Community College, giving students enrolled in the class an opportunity to earn college credit. Sociology is an overview of the subject presented at both the High School and Collegiate levels. This course will include some of the concepts of the discipline and major aspects of sociological basics, research methods, culture, race and ethnicity, social class, gender, and deviance. Students will explore concepts and theories that relate to humanity, including current and persistent issues confronting human society. This course is taught through Distance Learning.

## **Physical Education**

All students must earn 2 units of credit in physical education.

## **Physical Education 9-12**

½ Credit

Students take this course every other day for a full year

Students are generally scheduled for PE classes by grade level. Focus in all PE classes is on age-specific health and fitness concepts. Students participate in individual, dual and team sports and are instructed on rules, skills and other activity-related concepts.

## Science

All students must earn 3 units of credits in science and pass one Regents science exam.

Courses must include one life science (Living Environment) and one physical science (Earth Science, Chemistry, Physics or other as applicable).

The third can be in either category.

Students may earn the third unit of credit in science through successful completion of a BOCES CTE program, depending on the program.

Students pursuing a Regents Diploma with Advanced Designation must earn a 65 or higher on 2 Regents exams.

## **Earth & Space Science**

1 Credit

Earth Science is a physical science course covering topics such as mapping skills, rocks and minerals, plate tectonics, erosion, Earth's geological history. meteorology, climate and astronomy. The course will emphasize a student-centered problem-solving approach to stated learning objectives and laboratory assignments using scientific inquiry to develop explanations of natural phenomena. Students must successfully complete 1200 minutes of laboratory experiences with satisfactory written reports for each investigation. Each class meets once every day of the 6day cycle and labs meet every other day.

## **Life Science Biology**

1 Credit

This living science course is designed for the understanding of the basic concepts of biology and to thinking in a scientific manner. The overall objective of this course is to learn about biology and to pass the regents exam.

Biology is the study of life. This is a difficult subject and will require a lot of work throughout the year. The topics that will be covered throughout the year will include cells, reproduction, genetics, evolution, and ecology. All students are required to take 10<sup>th</sup> grade regents biology, which is a requirement for a regents diploma. Each student is also required by the state to complete 1200 minutes of laboratory instruction before he/she is eligible to take the regents exam.

## Chemistry

1 Credit

Chemistry is the study of matter and energy. In Regents Chemistry, students explore the nature of the atom and its behavior in depth. Topics include, but are not limited to: atomic structure, bonding, types of reactions, stoichiometry, solutions, acids and bases, organic chemistry, and nuclear chemistry. In order to be eligible to take the Regents examination, students must complete at least 1200 satisfactory laboratory minutes. Chemistry is a physical science course.

## **Applied Physical Science**

1 Credit

This course is non-Regents science elective course offered to students who have passed at least one science Regents exam and two science courses. This course does not have a separate lab session.

## **Physics**

1 Credit

This Regents-level physical science course is designed to teach students the fundamental concepts of physics. Such topics include the study of motion, forces, energy, waves, electricity, magnetism, optics, and particle physics. A science course highly involved in mathematics, physics requires algebra and trigonometry to solve various problems that describe how the world around us operates. Accompanying the lecture style class will be a laboratory class where students will be able to apply the concepts they learn in a hands on manner through throwing pumpkins off rooftops, bowling with frozen turkeys, launching water balloons 100 yards out of a giant slingshot, building a marble rollercoaster, and using multiple scientific tools to analyze the problems at hand.

Recommended prerequisites: Algebra II

# Foundations of Physical Computing (Robotics) 1 & 2 1 Credit Each

\*Math or Science Credit

Please description under Math.

## Biology 101/102 Principles of Biology DC

1 Credit

This is a dual-credit course with Tompkins Community College

#### Biology 101 (Fall)

Course Description

This is a half year course, equivalent to one semester of introductory level biology, presenting an overview of biological principles. Principles of Biology is designed for students who do not plan to major in science, environmental science, medicine, or a science-related field. Topics in BIOL 101 include, chemistry of life, cell structure and function, cellular energetics, and molecular inheritance. Laboratories are strongly quantitative. BIOL 101 requires 1500 minutes of laboratory time. Substantial investment is required by students prior to lectures and laboratories. BIOL 101 fulfills the SUNY General Education Natural Sciences requirement.

Prerequisites: Successful prior completion (C or higher) of a Regents Science course. Students must have at least a junior standing.

#### Biology 102 (Spring)

**Course Description** 

This is a half year course, equivalent to one semester of introductory level biology, presenting an overview of biological principles. Principles of Biology is designed for students who do not plan to major in science, environmental science, medicine, or a science-related field. Topics in BIOL 102 include micro and macro evolution, biodiversity, microbiology, and ecology. Laboratories are strongly quantitative. BIOL 102 requires 1500 minutes of laboratory time. Substantial investment is required by students prior to lectures and laboratories. BIOL 102 fulfills the SUNY General Education Natural Sciences requirement.

Prerequisites: Successful prior completion (C or higher) of a Regents Science course. Students must have at least a junior standing. Students who have completed BIOL 101 need to have earned at least a C in the course.

## **Social Studies/History**

All students must earn 4 units of credit in Social Studies/History. Please see the sheet on Diploma and Graduation Requirements for information on exams.

#### **Global Studies 9**

1 Credit

The global history and geography core curriculum is designed to focus on the five social studies standards, common themes that recur across time and place, and eight historical units. This is a two-year curriculum and students will take the required Global History Regents Exam at the conclusion of Global Studies 10 or AP World History. Units include: Ancient Worlds-Civilizations and Religions (BC 4000-500 AD); Expanding Zones of Exchange and Encounter (500-1200); Global Interactions (1200-1650); The First Global Age (1450-1770); An Age of Revolution (1750-1914); A Half Century of Crisis and Achievement (1900-1945); The 20th Century Since 1945; Global Connections and Interactions.

#### **Global Studies 10**

1 Credit

This is the second half of the global history and geography core curriculum. Units include: The First Global Age (1450-1770); An Age of Revolution (1750-1914); A Half Century of Crisis and Achievement (1900-1945); The 20<sup>th</sup> Century Since 1945; Global Connections and Interactions.

Students will take the required Global History & Geography Regents exam in June.

Pre-requisite: Successful completion of Global Studies 9

#### Global Studies 10 - Dual Credit

1 Credit

MVCC Dual Credit – HI103 – History of Western Civilization: Early Civilization to 1453 and HI104-History of Western Civilization: 1453 to Present (total of 6 MVCC credits)

#### History of Civ. I (HI 103)

The course traces development of Western Civilization from its Greek beginnings to the fall of Constantinople in 1453. Beginning with the Greek experience, Western Civilization developed in uniquely different ways from the rest of the civilized world. Patterns of Western thought led to the emergence of ideals such as the dignity and rights of man, free expression, social inclusion, and equal opportunity. The influence of Western forms of political and economic organizations on the modern world is examined.

#### History of Civ. II (HI 103)

This course is a continuation of the history of Western Civilization, beginning with the Renaissance and continuing to the present. It investigates the philosophical, international, political, economic, and social movements that dominated events leading up to the present time. It examines the reasons and motivations behind the events and perspectives of modern Western Civilization.

For both sections of the course, we follow the AP world history rubrics and students are preparing for the AP World exam while receiving credit from MVCC.

Students will take the required Global History Regents Exam in June and are strongly encouraged to take the AP World History exam in May.

Pre-requisites: Successful completion of Global Studies 9 and teacher recommendation

## **U.S. History/Government**

1 Credit

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States. Instructional methods will include interactive lectures, class discussions, projects, and elated media. The course will be divided into 16 chronological units in order to prepare for the required

## **U.S. History - Dual Credit**

New York State Regents Exam.

1 Credit

MVCC Dual Credit – HI111 & 112 - US History 1492-1850 and 1850-present (total of 6 MVCC credits)

U.S. History DC is a challenging course that is meant to be the equivalent of a freshman college course and can earn students college credit. It is a two-semester survey of American history from the age of exploration and discovery to the present. Solid reading and writing skills, along with a willingness to devote considerable time to homework and study, are necessary to succeed. Emphasis is placed on critical and evaluative thinking. Lecture and discussion sessions form an essential component of this class and the students will participate in a wide variety of research- and performance-based assignments. This course will also prepare students for the required New York State Regents Exam.

Prerequisite: Open to Juniors & Seniors

## **Participation in Government**

½ Credit

Participation in Government is a required Social Studies course for graduation in New York State and is the study of civics, citizenship and government on the local, state and federal levels. Students will also develop their abilities to probe ideas and assumptions, ask and answer analytical questions, evaluate evidence, formulate rational conclusions and develop participatory skills. Students will be required to contribute a minimum of 20 hours of Community Service for successful completion of the course. This community service can be completed as part of the full year of Government & Economics courses.

#### **Economics**

½ Credit

This is an introductory course in economic theories and includes topical areas in economics and how they impact our daily lives. The main topics include: scarcity, factors of production, economic systems, demand and supply, market structures, US banking, economic growth, and monetary and fiscal policies. Current economic issues will be emphasized.

## **Technology/Business**

New York Mills School District requires that all students enroll in Introduction to Computers.

## **Introduction to Computers**

1 Credit

Introduction to Computers is a full year course required by the district. Students will learn the importance of internet and computer safety as well as proper ethics as it relates to computer use. Proper keyboarding technique will be emphasized as students receive a thorough overview of word processing. Areas covered in this segment are business/personal correspondence (including blogging), high school and college report writing formats, collecting, recording and charting data, tables, tabulations, and desktop publishing. This course concludes with an introduction to spreadsheet formats and formula writing to solve 'what if' situations. Many of the assignments through this course are project based.

#### **BM108 Personal Finance**

½ Credit

MVCC Dual Credit (3 Credits) – Seniors only This course is offered in the fall

This course teaches the fundamentals of personal finance through the creation of a financial plan, management of personal finances, and reaching personal financial goals. Topics include the establishment of financial objectives (home ownership, education, and retirement), budgeting and savings, personal income tax, investments (stocks, bonds, and mutual funds), retirement, and estate planning. The effective use of and management of credit is covered.

## **BM120 Principles of Marketing**

½ Credit

MVCC Dual Credit (3 Credits)-Seniors Only This course is offered in the spring

This course emphasizes the basic practices, concepts, and activities involved in developing a successful marketing program. Topics include buyer behavior, market identification, product development, distribution, promotion, pricing, and the uncontrollable factors (economic, social, political, legal and technological) involved in the changing marketing environment of today.

## **Accounting I DC**

1 Credit

MVCC Dual Credit – AC 110 Principles of Accounting

AC115 Financial Accounting
(3 credits each)

This course is designed to provide students with an understanding of basic accounting terminology, the financial accounting cycle, and primary financial statements.

Accounting I is a full year course that covers the entire accounting cycle for a sole proprietorship and touches on other styles of businesses. Students will also learn how to analyze a transaction, journalize, post, adjust and close accounts at the end of a fiscal period and learn about what goes into preparing payroll. Other specific areas covered include decision making based on cash, accounts receivable, inventory, property, plant and equipment, current liabilities and owner's equity.

This course is available to students in grades 10-12 and is a good option for all students considering a career in business, finance, and/or management.

## **Accounting II**

1 Credit

Advanced Accounting is a full year course which further emphasizes the concepts and practices of Accounting I. Students begin with learning how a corporation is run. The full accounting cycle for a corporation, including the purchase and selling of stocks is covered here. Students will work with preparing the same financial statements and transaction analysis as in Accounting I as well as asset depreciation, taxes, and payroll. This course ends with an introduction to the concept of departmentalized accounting.

Prerequisite: Accounting I

## DDP - Design, Drawing, and Production

1 Credit

DDP is a hands-on pre-engineering course which can be taken in grades 9-12. Students will learn about the different aspects of production systems and will explore technical board drawing as well as 3D modeling and drawing on the computer. In completing the course work students will design and build air racers, curio and mantle clocks, picture frames, mouse trap powered cars, and other projects utilizing line or mass production techniques.

This is a fun class which offers a nice mix of hands-on activities as well as a more in-depth look at the design process.

\*This class meets the NYS Requirement in Fine Arts