BROADALBIN-PERTH
CENTRAL SCHOOL DISTRICT

JR./SR. HIGH SCHOOL

CURRICULUM GUIDE

2024

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Academics at Broadalbin-Perth Jr./Sr. High School

Broadalbin-Perth Central School District offers a rigorous, innovative and high-quality academic program that meets children where they are, whether they require enrichment or need extra help. Students continually build on their skills throughout their school careers, allowing each student to reach his or her academic potential and develop a desire for lifelong learning.

The district is dedicated to preparing students for college and careers by providing educational programs that align with individual students' interests, talents and needs, as well as the New York State Department of Education's learning standards.

Course Progressions

With a focus on preparing students to be ready for college and careers, Broadalbin-Perth Junior Senior High School provides a rigorous, academic program that includes a visual, sequential outline of content for students in grades 7-12. Course progressions are based on various levels, including Regents and accelerated, to help parents and students understand how to best plan for their academic success and prepare for graduation.

Courses required for graduation

Throughout this guide, courses that must be taken by all students in order to graduate from B-P Jr./Sr. High School are marked with a graduation cap.

How four-year colleges view your high school program

Four-year colleges look to see if students have taken the most rigorous program available to them and in which they can demonstrate success. Most colleges indicate that the single most important part of a student's application is the high school transcript. The transcript includes:

- The names and levels (e.g. AP, College Level, Regents) of the courses taken
- The final average earned in each course completed
- Regents exam scores
- The 3-year cumulative weighted/unweighted GPA and rank
- Foreign Language Check Point Exam
- The college courses/AP courses multiplier (x1.06 are on the transcript next to course)

*The information presented in this guide is current as of February 2024. Course offerings vary from year to year; not all courses described in this guide will be offered every year. For the most up-to-date information about course offerings, visit **highschool.bpcsd.org/curriculum** or speak with your school counselor.*

Academic Pathways

Regents Pathways

Students in the Regents level pathway are working toward a Regents or Advanced Regents diploma. Course and assessment requirements for these diplomas vary (see page 36 for details). Students in this Pathway are developing the characteristics outlined in the Profile of a Broadalbin-Perth Graduate.

Courses in the Regents Pathway develop students' ability to master grade-level standards and focus on developing skills students need to be college and career-ready.

Acceleration/AP/College Course Pathways

Broadalbin-Perth offers a comprehensive curriculum that includes courses that are Accelerated, College, and Advanced Placement-level. These courses are more rigorous than Regents-level courses; the curriculum is delivered at a faster pace and in greater depth, incorporating a more complex analysis of the material.

In addition to the characteristics of a Regents and college-level student, students who are good candidates for acceleration pathways are those who:

- grasp ideas quickly in order to effectively manage the pace of the curriculum;
- have a high level of interest in the subject area;
- demonstrate creativity and critical thinking;
- often initiate their own learning;
- communicate (read, write, speak, and listen) above grade level;
- demonstrate the interest in and ability to reflect on their learning, as well as provide feedback on ideas proposed by others;
- display independence and recognize the additional responsibility and effort that is required for these levels of classes.

Courses in the Accelerated Pathway present advanced-level material to students at a more rapid pace.

Advanced Placement and College Courses

How colleges treat college credit that is earned in high school varies. Each has its own specific guidelines which are usually applied after a student has decided to attend that college. A primary factor to consider when deciding whether or not to pay tuition for college credit is: will the college I attend accept the credit? The best way to answer that question is to call colleges in which you are interested. Ask whether they would accept transfer credit from SUNY Fulton Montgomery Community College and Syracuse University. Some may apply the credit to your transcript; some may give you advanced standing; some may waive other requirements.

Advanced Placement (AP) courses are standardized in that they prepare students to take a national comprehensive examination at the end of the course. The AP exam must be taken in order to earn the AP designation on the transcript. Advanced Placement exam fees average $98.00 per exam. The fee is greatly reduced for students who qualify for the Free and Reduced-Price Lunch program. Please see your counselor if you do not qualify for the Free and Reduced-Price Lunch program and the fee would present a financial hardship. Many colleges will issue a credit or advanced standing to students who earn scores of 4 or 5 on an AP exam; some will consider the score of 3 on some AP exams.

Paying reduced tuition for college credit in high school courses can result in savings but it is best to check with colleges to which you may apply to determine if they will accept the credit.

DISTRICT PROFILE

Profile of the BROADALBIN-PERTH CENTRAL SCHOOL DISTRICT

Statistics
1,771 Total students in pre-K to grade 12
10.9 to 1 Student/Teacher Ratio
$41.3M 2023-24 Budget

Graduation Rate

Broadalbin-Perth consistently has one of the highest graduation rates in New York's Capital Region:

87% in 2022 and **89% in 2021**.

Grading System

Class average and rank are determined by a numerical average of all courses. Averages are unweighted. Conversion from numeric to letter grades can be made as shown:

95 - 100%	A+	4.0
93 - 94%	A	3.8 - 3.9
90 - 92%	A–	3.5 - 3.7
88 - 89%	B+	3.3 - 3.4
85 - 87%	B	3.0 - 3.2
82 - 84%	B–	2.7 - 2.9
80 - 81%	C+	2.5 - 2.6
78 - 79%	C	2.3 - 2.4
75 - 77%	C–	2.0 - 2.2
72 - 74%	D+	1.7 - 1.9
70 - 71%	D	1.5 - 1.6
65 - 69%	D–	1.0 - 1.4
below 65%	F	0.0

Did you know?

Academics

- B-P offers several Advanced Placement courses through its innovative Virtual AP program.
- B-P offers 24 courses through which students can earn more than 60 college credits. Courses are offered through nearby Fulton-Montgomery Community College (FMCC) or Syracuse University Project Advance (SUPA).
- Members of the Class of 2023 who took college or AP courses at B-P earned 1,113 total credits.
- B-P offers more than 50 elective courses across all subject areas, designed to appeal to a variety of student interests and suitable to different abilities.
- B-P students have opportunities to participate in programs at the Career and Technical Education Center at HFM BOCES; the Clean Tech Early College High School at TEC-SMART; the HFM BOCES Pathways in Technology Early College High School (PTECH); and the HFM BOCES Agriculture PTECH.

Athletics & Extracurricular Activities

- B-P's club offerings change and grow each year to meet students' interests and needs. During the 2022-23 school year, high school students had 32 different club options to choose from.
- In 2022-23, B-P earned the School of Distinction Award from NYSPHSAA, recognizing that all 16 varsity teams achieved scholar-athlete status.
- B-P students in grades 7-12 have the opportunity to participate in interscholastic sports at the modified, JV and varsity levels in 13 sports for boys and girls. B-P is a member of the Foothills Council and is competitive in league, sectional and statewide play.
- B-P has sent teams to the national and world championships in Odyssey of the Mind, KidWind Challenge, FIRST Tech Challenge, and Team America Rocketry Challenge.
- B-P is a perennial participant in Masterminds, Future Cities, and FIRST Lego League.
- Each spring, the BPHS Drama Club produces full-scale, Broadway-style musicals with students working behind the scenes as well as on the stage. More than 80 students were involved in the 2023 production of "The Wizard of Oz."
- During the 2018-19 school year, nearly 30 students had their artwork selected to appear in various competitive regional art shows.
- During the 2019-20 school year, more than 200 students in grades 4-12 played a musical instrument through the district's instrumental music program.

Profile of the Class of 2023

Regents Diploma versus Local Diploma BREAKDOWN

Total diplomas granted = **124**

Graduates rate: **93.4%**

- Graduates earning a Regents diploma or better: **98%**
- Those earning an Advanced Regents diploma or better: **36%**

Graduates earning a local diploma only: **2%**

Post-Graduation Plans

Members of the Class of 2023 pursued higher education at colleges and universities.

- Total to Higher Ed. **60.9%**
- 4-YR. COLLEGES **27.4%**
- 2-YR. COLLEGES **33.5%**

BROADALBIN-PERTH
About our school and community

About 1,700 students make up the district's two schools, which are situated four miles apart in the town of Perth and village of Broadalbin. Broadalbin-Perth Elementary School is located at the Perth campus and houses students in pre-K through grade 6. Broadalbin-Perth Jr./Sr. High School is located at the Broadalbin campus and houses students in grades 7-12. The district employs about 323 total staff, including about 158 teachers.

The Broadalbin-Perth Central School District was formed in 1987 when the Broadalbin Central School District annexed the Perth Central School District. The district includes more than 11,500 residents and covers about 83 square miles in portions of Fulton, Montgomery and Saratoga counties. It includes parts of the towns of Broadalbin, Perth, Amsterdam, Galway, Edinburg, Johnstown, Mayfield, Northampton and Providence.

During the 2023-24 school year, Broadalbin-Perth High School enrolled 528 students. All students take New York State Regents Exams in English, Social Studies, Math and Science. BPHS uses a block schedule.

Important COVID notes: During the fourth quarter of the 2019-20 school year, students were graded on a pass/fail basis. During the 2020-21 school year, students were in either a remote or hybrid learning model (cohorting) with reduced classroom time, which resulted in limited elective choice for students. During both the 2021-22 and 2022-23 school years, any students who receive a score of 50-64 on a NYS Regents are eligible for a special appeal passing score; "SA" will show on the student's transcript if they received the special appeal in place of the Regents score.

Additional information about specific courses is available in the online curriculum guide, located on the district website at www.bpcsd.org/curriculum-guide. In addition to a short course description, a more complete syllabus is available for many courses.

Broadalbin-Perth Senior High School
Mark Brooks, Principal
100 Bridge Street, Broadalbin, NY 12025
Main Office: 518-954-2600

School Counselors
Jennifer Grimmick, Stephanie Hotaling,
Charla Simonson & Jennifer Steele
Counseling Office: 518-954-2620

CEEB CODE **330520**

Class of 2023 Graduation Requirements

- 4 units of English
- 4 units of Social Studies
- 3 units of Mathematics
- 3 units of Science
- ½ unit of Health
- ½ unit of Personal Finance
- 1 unit of Art or Music
- 1 unit of Foreign Language
- 4-5 units in a sequence or electives
- 2 units of Physical Education (over 4 years)

23.0 units total

Acceleration

Broadalbin-Perth offers an accelerated program in English, math, science and social studies. Criteria for student placement in the acceleration program include course grades, Regents examination grades, attendance, and teacher evaluation.

Rank in Class

A student's rank in their class is determined as follows:

1. The final marks in grades 9, 10, and 11 and mid-year averages in grade 12 are used.
2. Final marks are calculated using the four marking periods, and the midterm and final exam grades. The proportion is as follows:
   - **Marking periods** – 80%
   - **Midterm** – 10%
   - **Final exam** – 10%

   The final averages of all honors courses are weighted by a factor of 1.02, and all college and AP courses are weighted by a factor of 1.06.
3. All subjects with numerical grades have been included. Failed courses are included. If a student repeated a subject, the higher mark is used in calculating the cumulative average.
4. All students in the class have been included. No differentiation has been made between "college prep" and "non-college prep" students.
5. Half-year and quarter-year courses are proportionally weighted based on credit.

District Mission

Broadalbin-Perth Central School District provides a stimulating and safe environment of success for lifelong learning. Students of all ages will develop intellectually, emotionally, creatively, socially and physically through the cooperative efforts of school and community, **all striving for excellence**.

College Course Offerings

Syracuse University Project Advance
- General Biology I & II
- Introduction to Sociology
- Psychology: Foundations of Human Behavior

Fulton-Montgomery Comm. Coll.
- Analytic Geometry & Calculus
- Business Communications
- Computer Science I & II
- English I & II
- Essentials of Anatomy & Physiology
- Essentials of Entrepreneurship
- Healthcare Provider CPR
- Intermediate Algebra
- Intermediate Spanish I & II
- Marketing
- Music Theory
- Pre-Calculus
- Principles of Business
- Statistics
- Studio Art
- Survey of American History I & II

AP Course Offerings

- English Literature & Composition
- English Language & Composition
- Biology
- Chemistry (varies by year)
- Environmental Science (varies by year)
- Calculus AB
- Statistics
- Computer Science (varies by year)
- World History
- U.S. History

English Language Arts

The high school English curriculum is designed to help students develop the literacy skills needed for success in college and career. Students are required to successfully complete four units of credit and pass the New York State English Regents examination to graduate with a Regents diploma.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Regents English	English 6 + Reading 6	English 7	English 8	English 9	English 10	English 11[R] Yearbook*	English 12 Murder Mystery Mayhem* FMCC Public Speaking**½ FMCC English 103**½
Accelerated English	English 6 + Reading 6	English 7	English 9	English 10	English 11[R]	AP English Language**	AP English Literature** Murder Mystery Mayhem* FMCC Public Speaking**½

* Elective courses. Electives and Grade 12 options may vary from year to year.

** College credit courses ½ Half year course [R] Regents course

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

English 7

Grade 7 Full year 1 unit

In English 7, students will develop foundational skills in reading, writing, speaking, and listening in accordance with the NYS Next Generation Learning Standards. Students will read novels, short stories, articles, and poems to develop their comprehension and analytical skills. Students will write informative, argumentative, and narrative essays along with shorter writing pieces including paragraphs. English 7 offers students the opportunity to practice skills that they will utilize throughout their education and beyond.

English 8

Grade 8 Full year 1 unit

In English 8, students will continue to develop and hone the foundational skills that they learned in English 7. Students will improve skills in reading, writing, speaking, and listening in accordance with the NYS Next Generation Learning Standards. Students will read novels, short stories, articles, and poems to advance their comprehension and analytical skills. Students will write informative, argumentative, and narrative essays, a research paper, and shorter writing pieces including frequent paragraphs. English 8 students will also work to advance their sentence structure and analyze the effects of authors' choices, including the effects of literary devices. English 8 offers students the opportunity to practice skills that they will utilize throughout their education and beyond.

English 9

Grades 8-9 Full year 1 unit

English 9 is a comprehensive English course. Students will read, discuss and write about short stories, novels, poems, plays, and works of true experience. Students will write a variety of analytic and research-based papers, focusing on literary analysis and argument writing. In addition, students will have multiple opportunities to improve their vocabulary and their speaking and listening skills.

Prerequisite: *Course recommendation required for accelerated grade 8 students (teacher signature)*

English 10

Grades 9-10 Full year 1 unit

In English 10 there are two distinct sections of the course: analysis and interpretation of novels, short stories, plays, and poetry; and integration of the writing process into both analytic and creative writing pieces. Students will be challenged as readers, writers and thinkers as they explore some of the greatest literature of the last hundred years and plumb the depths of their own ideas and language. Additionally, students will learn to evaluate their own and other students' writing by engaging in all facets of the writing process.

English 11

Grades 10-11 Full year 1 unit

This course is required of all students who have successfully completed English 10. Students will read, discuss, analyze, interpret, and write about important American literature and trace main ideas in American literature.

FMCC ENG 103: English Composition

Grade 12 Half year ½ unit & 3 college credits

This course is designed to improve effective college-level communication in writing. Assignments include argument development, analysis, narrative strategies, and current research techniques and procedures for documenting sources. Students plan, draft, and revise original texts. Analyzing and writing are focal points on a daily basis.

Prerequisite: *Teacher signature*

FMCC ENG 103/AP Language & Composition

Grade 11 Full year 1 unit & 3 college credits

This course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts from many disciplines and historical periods. This course directly correlates with the AP examination that will be offered at the end of the year.

Prerequisite: *Teacher signature*

FMCC ENG 132: Public Speaking

Grade 12 Half year ½ unit & 3 college credits

This course aims to enrich each student's ability to communicate, and introduces the students to numerous forms of public speaking. Opportunities to practice and perfect both the formal and informal deliveries of speech while maintaining individual expression and creativity is a focal point. Projects, speeches, analysis, and some writing are expected.

Prerequisite: *Teacher Signature*

Murder, Mystery, Mayhem & More

Grade 12 Full year 1 unit

This course explores mysteries, along with the often macabre nature of people, using a variety of texts and movies. Throughout the year we'll delve into the mind of murderers to figure out what makes them tick, solve mysteries using the clues we are given, and enjoy one of the all-time creepiest writers, the master of mayhem, Edgar Allan Poe. Both fiction and nonfiction texts will be used to explore a range of crimes, at both the local and national level. In addition to traditional written pieces, you'll be able to show what you know through slide presentations, police evidence boards, and podcasts. There's something for everyone!

Adirondack Humanities

Grade 12 Full year 1 unit

This course offers students an opportunity to study both the history and the literature associated with the Adirondack Park. The course follows the English 12 Next Gen Standards. Students will learn about the history and origin of the Park, beginning with Native American activity, followed by the move to State Park status. We will also study literature associated with the most important and exciting elements of the Park, including the 1932 and 1980 Winter Olympics, the High Peaks, Park administration, and crime in the Adirondacks

FMCC ENG 104/AP Literature & Composition

Grade 12 Full year 1 unit & 3 college credits

This course is an Introduction to literature at the collegiate level. Students will follow the AP curriculum, and learn how to read fiction, drama and poetry closely, and will study foundational texts from a wide variety of ethnic, regional, and generational backgrounds. The class will ask students to write thoughtfully about the texts we study, and to develop skills that allow close connections to current events and the world we live in. Students will make connections to their own lives, using the texts we read to enrich their own experiences as young adults.

Prerequisite: *Teacher Signature*

Conspiracy Theory

Grade 12 Full year 1 unit

In this course students will explore some of the most renowned conspiracy theories of our time by investigating both sides of every theory. Despite such theories being interesting and thought-provoking, this course will not be about learning the unsubstantiated facts that surround these views. Instead, we will analyze the history, reasoning, arguments, and rhetoric as well as evaluate sources surrounding these theories. Students will explore: Why do these theories exist? Why are people attracted to them? What do they reveal about society and culture? This English 12 class varies per year.

Mathematics

The Mathematics Department provides a sequence of courses intended to meet the needs and abilities of every student. Basic concepts and skills are stressed at every level. Mastery of mathematical skills, critical thinking, logical reasoning, the beauty of mathematics, the contributions of mathematics to society, familiarity with technology and preparation for future study are all objectives of the curriculum. Students may be required to use a calculator. See individual course descriptions for specifications.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Regents Mathematics	Math 6	Math 7 with lab	Math 8	Algebra I[R]	Geometry[R]	Algebra II[R]	FMCC Pre-Calculus** AP Statistics**
				Algebra I[R] with lab	Geometry[R]	Math Applications Geometry Elementary Algebra Intro to Statistics Intermediate Algebra** Algebra II	Math Applications Geometry Elementary Algebra Intro to Statistics Intermediate Algebra** Algebra II FMCC Pre-Calculus**
				Algebra I[R] with lab	Geometry I		
Accelerated Mathematics	Math 6	Pre-Algebra 4/6 Lab	Algebra I[R]	Geometry[R]	Algebra II[R]	FMCC Pre-Calculus** AP Calculus** AP Statistics**	AP Calculus** AP Statistics**

** College credit courses [R] Regents course

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

Math 7

Grade 7 Full year 1 unit

In this course, we explore mathematical concepts that are the foundation for success in 8th Grade and High School mathematics courses. This course will focus on: simplifying and solving expressions and equations, understanding rate and unit rate as it relates to linear equations, grasping the concepts of percent in the context of multi-step problems, analyzing probability problems, and statistics. Emphasis is placed on conceptual understanding, multi-procedural fluencies, and problem-solving.

Accelerated Math 7 Pre-Algebra

Grade 7 Full year 1 unit

In this course, we will explore mathematical concepts that are the foundation for success in Algebra I. This course will focus on: simplifying and solving expressions and equations, both two-step and multi-step, understanding rate and unit rate as it relates to linear equations, grasping the concepts of percent in the context of multi-step problems, analyzing probability problems, and statistics. We also cover rational and irrational numbers and begin to explore operations with polynomials. Emphasis is placed on conceptual understanding, multi-procedural fluencies, and problem-solving. This is a challenging class and will require a commitment to out-of-class work.

Prerequisite: *Recommendation from grade 6 teacher and 90% or higher cumulative average in 6th grade math*

Math 8

Grade 8 Full year 1 unit

This course will explore mathematical concepts that are the foundation for success in High School mathematics courses. The course will focus on distinguishing and solving expressions and equations including bivariate linear equations, formulating and demonstrating exponent properties, grasping the concepts of functions and graphing linear functions including systems of equations, analyzing two and three-dimensional geometric features using angles, similarities, and congruence, and performing transformations on geometric figures. Emphasis is placed on conceptual understanding, multi-procedural fluencies, and problem-solving.

Algebra I with Lab

Grades 8-9 Full year 1 unit

Algebra I follows A Story of Functions, the Common Core curriculum for mathematics. Units of study cover operations with polynomials, systems of equations, sequence and series, factoring, graphing, methods for solving quadratic equations, transformations of functions, and statistics. A graphing calculator is permitted and used at this level. The prerequisite for this course is the successful completion of the eighth-grade math course. Students will take the Algebra I Regents Exam in June. Students are required to pass this exam in order to graduate from high school.

Prerequisite: *8th grade accelerated students need a teacher's signature*

Geometry I

Grades 10-11 Full year 1 unit

The course covers lines, triangles, quadrilaterals, transformations, coordinate planes, perimeter, area, and the Pythagorean Theorem, with an emphasis on application and guided practice. This course could be used as the first course in a two-year geometry sequence leading to the Geometry Regents examination. Alternatively, this course may fulfill the third year of the three years of math courses that are required for graduation from high school. A final examination will be given at the completion of this course.

Prerequisite: *A score of 65 or higher on the Algebra I Regents exam*

Geometry

Grades 9-12 Full year 1 unit

Geometry consists of the sequential and cumulative study of geometric definitions, postulates, theorems, and corollaries, implemented through mathematical modeling. Topics included in the curriculum are: Foundations of Geometry, Constructions, Geometric Reasoning, Parallel and Perpendicular Lines, Triangle Congruence, Properties, and Attributes of Triangles, Polygons, and Quadrilaterals, Similarity and Dilations, Right Triangles and Trigonometry, Extending Perimeter, Circumference, and Area, Spatial Reasoning, Circles, and Extending Transformational Geometry.

Problem-solving and critical thinking are emphasized. A graphing calculator is permitted and used at this level. Students will take the Geometry Regents examination at the end of the course in June.

Prerequisite: *A score of 75 or higher on the Algebra I Regents exam*

Algebra II

Grades 10-12 Full year 1 unit

Algebra II is a full year course curriculum that stresses the development of the student's mathematical reasoning ability. Topics included in the curriculum are: Linear and Quadratic Functions, Exponential and Logarithmic Functions, Sequences and Series, Transformations of Functions, Radicals and the Quadratic Formula, Complex Numbers, Polynomial and Rational Functions, and Probability and Statistics.

Problem-solving and critical thinking are emphasized. A graphing calculator is permitted and used at this level. Students will take the Algebra II Regents examination at the end of the course in June.

Prerequisite: *A score of 75 or higher on the Algebra I and Geometry Regents exams*

FMCC MAT 120: Integrated Algebra

Grades 11-12 Full year 1 unit & 4 college credits

This course is designed for students who wish to later enroll in college-level mathematics courses and/or earn college credits in high school. Topics include absolute value, equations, and inequalities; second degree (quadratic) equations, inequalities, graphs, and applications; relations and function; rational expressions, equations, inequalities, and applications; radical expressions and equations; and complex numbers.

This course is not open to students who have a grade of B or higher in Algebra II or students who have taken Precalculus or Calculus. There is an optional fee for this course that is determined by Fulton-Montgomery Community College (FMCC). A final examination will be administered at the completion of this course. Students in this course have the option of concurrently enrolling in MAT 125 for up to 3 hours of credit from FMCC.

Prerequisite: *Successful completion of Geometry and teacher signature*

FMCC MAT 140: Pre-Calculus

Grades 11-12 Full year 1 unit & 4 college credits

This course is a preparation course for college-bound students leading toward a course in calculus. The main focus will be to integrate intermediate algebra, geometry, and trigonometry with a function approach. Topics will be developed on an intuitive level, as well as in a way to help students develop the necessary working skills for the study of more advanced mathematics.

Students will use a graphing calculator throughout the course. A final exam will be administered at the completion of the course. There is a fee for this course that is determined by Fulton-Montgomery Community College (FMCC).

Prerequisite: *The successful completion of Algebra II or FMCC Integrated Algebra, and teacher signature*

FMCC MAT 170: Calculus

Grade 12 | Full year | 1 unit & 4 college credits

This is an introductory course in calculus offered for college-bound high school students. Focuses will include limit theory, derivatives and integrals, along with the application of these concepts. Students will use a graphing calculator throughout the course. A final examination will be administered at the completion of the course. The prerequisites for this course include the successful completion of Pre-Calculus and a teacher recommendation. There is a fee for this course that is determined by FMCC.

Prerequisite: *Teacher signature*

AP Calculus AB

Grade 12 | Full year | 1 unit & 4 college credits

AP Calculus AB is roughly equivalent to a first-semester college calculus course devoted to topics in differential and integral calculus. The Advanced Placement course covers a number of topics in these areas, including limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections among these different representations. Students learn how to use technology to help them solve problems, experiment, interpret results, and support conclusions. This course is designed to prepare the student to take more advanced courses in college, both in mathematics and in subject areas that require an extensive background in mathematics. The prerequisite for this course is the completion of Honors Pre-Calculus with a minimum course grade of B. Students in this course have the option of concurrently enrolling in MAT 157 for up to 4 hours of credit from Fulton-Montgomery Community College. The AP Calculus AB exam is offered in May and a final exam will be administered in June.

Prerequisite: *Successful completion of Pre-Calculus and teacher signature*

AP Calculus BC

Grade 12 | Full year | 1 unit & 8 college credits

Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions. In addition to the AB topics, parametric and polar functions and infinite series are covered. This course covers the material of traditional Calculus I and II.

The AP Calculus BC examination is offered in May (up to 8 credits can be earned depending on AP score) and a final examination will be administered in June.

Prerequisite: *Successful completion of Pre-Calculus and teacher signature*

AP Statistics (FMCC MAT 125)

Grade 12 | Full year | 1 unit & 3 college credits

This Advanced Placement course is designed as an elective for students interested in investigating statistical practices. Topics include exploring and understanding data, exploring relationships between variables, gathering data, randomness and probability, hypothesis testing for normal, and t models. Students in this course have the option of concurrently enrolling in MAT 125 for up to 3 hours of credit from Fulton-Montgomery Community College (FMCC). The AP Statistics examination is offered in May and a final examination will be administered in June.

Prerequisite: *Successful completion of the Algebra II course, a score of 75 or higher on the Algebra II Regents exam, and teacher signature*

Applications of Math

Grades 11-2 | Full year | 1 unit

This full-year course was developed to equip high school students with the knowledge to be successful beyond high school. The Applications of Math course aims to improve the calculation, application, and inspiration of mathematics among students. Students will learn calculation skills through the topics of mental math, number fluency, geometry, and probability. They will understand the applications of math skills through consumer math, machine learning, investment, and career exploration units. Finally, they will be inspired by math, learning strategies to solve puzzles, think logically, recognize the natural presence of math in our world, and create art using mathematical techniques.

Prerequisite: *Successful completion of Algebra I, a score of 65 or higher on the Algebra I Regents exam, and a second year of math*

Introduction to Statistics

Grades 11-12 | Half year | ½ unit

Intro to Statistics provides students with the same statistical concepts as Algebra II with some re-teaching of the prerequisite statistics. Basic concepts of probability, descriptive and inferential statistics, including central tendency, variability, correlation, regression, parametric tests are covered. Ideally, this course will encourage students to take AP Statistics.

Prerequisite: *Successful completion of Algebra I and a score of 65 or higher on the Algebra I Regents exam*

FMCC MAT 040: Elementary Algebra

Grades 11-12 | Half year | ½ unit

A modern approach to introductory algebra. This course is designed for students who have a limited mathematics background. Topics include sets and number systems, operations, exponents, polynomials and rational expressions, first-degree equations, graphs and verbal problems. Not credited toward the Associate's Degree mathematics requirements. In certain academic programs, completion of this course, based on the student's academic background, may be necessary preparation for enrollment in courses required for graduation.

Science

Students are required to successfully complete three units and one Regents examination in science to graduate with a Regents diploma. Of the three units, one must be from the Living Environment curriculum and one from the Physical Setting. Students in pursuit of an Advanced Regents diploma are required to pass two Regents Examinations (one Physical Science and one Life Science).

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Science	Science 6	Science 7	Science 8	General Science	Living Environment[R]	Physical Setting/ Earth Science[R] Everyday Engineering Adirondack Sciences	Adirondack Sciences Everyday Engineering
Regents Science	Science 6	Science 7	Science 8	Living Environment[R]	Physical Setting/ Earth Science[R] AP Environmental Science	Physical Setting/ Chemistry[R] FMCC Anatomy & Physiology** Science Research Forensic Science SUPA Biology** AP Environmental Science	Physical Setting/Physics[R] FMCC Anatomy & Physiology** Science Research Everyday Engineering Forensic Science SUPA Biology** AP Environmental Science
Accelerated Science	Science 6	Science 7	Living Environment[R]	Physical Setting/Earth Science[R]	Physical Setting/ Chemistry[R] AP Environmental Science	Physical Setting/ Physics[R] FMCC Anatomy & Physiology** SUPA Biology** Science Research AP Environmental Science	AP Chemistry SUPA Biology** FMCC Anatomy & Physiology** Forensic Science AP Environmental Science Science Research

Elective courses and additional options may vary from year to year.

** College credit courses [R] Regents course

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

Science 7: Physical Science

Grade 7 Full year 1 unit

In Physical Science, students will study the physical universe as it is related to chemistry, physics, and the nature of science including electricity, magnetism, energy, machines, waves, light, and sound.

Science 8: Life Science

Grade 8 Full year 1 unit

In the Life Science course, students will learn about cells, human body systems, evolution, and ecosystems.

General Science

Grade 9 Full year 1 unit

This course is for students who would benefit from an additional year of life science/biology review. Designed with the regents in mind, students will be exposed to materials and concepts that will be taught and tested in the NYS Living Environment course.

Prerequisites: *Successful completion of Science 7 and Science 8*

Living Environment

Grades 8-10 Full year 1 unit

Living Environment is the study of living organisms and their environment. Students will study the key ideas and major understandings in the NYS Living Environment Core Curriculum. Some major topics that will be covered are unity and diversity among living organisms, human body systems and their role in maintaining homeostasis, genetics, evolution, reproduction and development, and ecology. Related lab activities and 1,200 minutes of documented lab work are course requirements. The Regents Living Environment examination will conclude the course.

Prerequisite: *Course recommendation required for Accelerated grade 8 students (teacher signature)*

Earth Science

Grades 9-12 Full year 1 unit

Earth Science is the study of our physical environment and will introduce students to geology, meteorology, astronomy, and oceanography. They will study the key ideas and major understandings in the NYS Earth Science Core Curriculum, including celestial phenomena as described by relative motion and perspective and the interactions among components of the air, water, and land. Major topics include plate tectonics, earth chemistry, earth history, resources and energy, weather factors and forecasting, oceans, climate and climatic change, and earth in space. Related lab activities and 1,200 minutes of documented lab work are course requirements. The Earth Science Regents examination will conclude the course.

Prerequisite: *Successful completion of Living Environment*

Chemistry

Grades 10-11 Full year 1 unit

Chemistry is a lab-based course for students planning to pursue a four-year college degree who have successfully completed two years of high school science. Related lab activities and 1,200 minutes of documented lab work are course requirements. The Chemistry Regents examination will conclude the course.

Prerequisite: *Successful completion of Living Environment or Earth Science. Co-Requisite: currently taking Algebra II*

Physics

Grades 11-12 Full year 1 unit

The course uses lab-based and guided-discovery learning methods that involve the use of computers and computer-based lab equipment to gather and analyze experimental data. Students use mathematics and reasoning skills to discuss these experimental results and how they model phenomena present in the real world. The course will investigate topics including measurement uncertainty, mechanics, energy, electricity and magnetism, waves, light, and nuclear physics. This course will provide an excellent background for any college course in physics and will serve any student well in further study of the sciences. Related lab activities and 1,200 minutes of documented lab work are course requirements. The Physics Regents examination will conclude the course.

Prerequisite: *Successful completion of Chemistry*
Co-Requisite: *Algebra II*

AP Chemistry

Grades 10-12 Full year 1 unit

The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For most students, the course enables them to undertake, as a freshman, second-year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. This course is structured around the four big ideas broken into 15 units articulated in the AP Chemistry curriculum framework provided by the College Board. In-class and at-home assignments consist of discussion questions, inquiry-based labs, worksheets, online activities, AP classroom progress checks, problems from the textbook, AP-style problems, and lab reports. A test is given after each unit of study on topics from 1-3 chapters. Students are prepared to take the AP Chemistry Exam in May.

Emphasis will be placed on the six science practices, which capture important aspects of the work that scientists engage in, with learning objectives that combine content with inquiry and reasoning skills. AP Chemistry is open to students who have completed regents Chemistry and wish to take part in a rigorous and challenging course.

Prerequisites: *Scores of 80 or higher on the Regents examinations for Chemistry, Physics, and Algebra II; course recommendation required (teacher signature)*

SUPA: AP Biology

Grades 11-12 Full year 1 unit & 8 college credits

This course is designed to be a college-level introductory course in the study of Biology. The AP Biology curriculum will run in conjunction with the Syracuse University Project Advance (SUPA) Biology 121-124 curriculum. The two courses will be blended and aligned to help ease the burden of taking two Biology courses at the same time. Students are expected to develop the skills necessary to successfully work at a college level. It will be necessary for all students to read independently, attend all lecture and lab classes, develop good note-taking ability, and finish assigned laboratory activities in a timely manner to successfully complete this course. Using a thematic approach students will be taught the major concepts in biology and will be able to demonstrate their knowledge of them and their relationship to each other in detail.

Prerequisites: *Scores of 80 or higher on the Regent examinations for Living Environment, Chemistry and Algebra II, or concurrent with Chemistry and Algebra II; course recommendation required (teacher signature)*

AP Environmental Science

Grades 10-12 Full year 1 unit

This course is designed to cover a variety of topics within the sciences. The goal is to provide you 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 risk factors of these problems, and to examine alternative solutions for resolving or preventing them. The emphasis in this class is placed on science as a process, energy conversions underlying all ecological processes, the Earth as an interconnected system, how humans alter the environment, environmental problems and their social context, and developing sustainable practices. This course adheres to the objectives instituted by the College Board for AP Environmental Science.

Prerequisites: *A score of 80 or higher on the Living Environment Regent examination; course recommendation required (teacher signature)*

Science Research

Grades 11-12 Full year 1 unit

Science Research is an upper-level elective course that focuses on team research conducted on the Great Sacandaga Lake. Students are tasked with a question that revolves around the biology of the lake. Experiments with fish populations, aquatic plant mapping, invasive species, etc. are just a few of the topics that will be investigated. The course will spend the fall and spring months on the district's floating classroom (Patriot 1 & Patriot 2) collecting data. These pontoon boats are equipped with state-of-the-art electronics that will allow our research team to map the lake and find fish. The winter months will be used to organize data and learn techniques for proper scientific writing. We will also be collaborating with the New York State Department of Environmental Conservation (NYSDEC), the Great Sacanadaga Lake Advisory Council (GSLAC), the Great Sacandaga Lake Fisheries Federation (GSLFF), and neighboring school districts. Students will produce a research document at the end of the study and present their findings to the appropriate agencies.

Prerequisites: *A score of 80 or higher on a Regents examination for Living Environment, Chemistry or Earth Science; course recommendation required (teacher signature)*

Anatomy & Physiology (FMCC)

Grades 11-12 Full year 1 unit & 3 college credits

A college course that is designed for the study of basic human anatomy and physiology, including anatomical terminology, cells, and the following systems: skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive. An introduction to common human disease processes, science majors as preparation for students who intend to enter the medical field, Physical therapy, or physical education.

Prerequisites: *Scores of 65 or higher on the Regents examinations for Living Environment or Earth Science and Chemistry; course recommendation required (teacher signature)*

Forensic Science

Grades 10-12 Full year 1 unit

This course is designed to provide students with the proper information to investigate crimes, describe and illustrate crimes and finally solve crimes. Tentative topics, of course, are crime scene analysis, toxicology, fraud investigation, blood analysis, DNA evidence, handwriting analysis, fingerprinting, and real-life crime cases. We also evaluate current crime shows for validity.

Adirondack Sciences

Grades 11-12 Full year 1 unit

This course is designed to cover a variety of topics relating to the Adirondack Park. The objective is to provide students with knowledge relating to aquatic and terrestrial sciences and wildlife management. ADK Sciences is an upper-level, yearlong science course. Students study a variety of topics that include: components of Adirondack ecosystems; relationships among habitats and ecosystems; identification of ADK organisms; exploring the high peaks, and studying the Great Sacandaga Lake.

Everyday Engineering

Grades 11-12 Full year 1 unit

This course explores the breakthroughs of engineering that lead to the comforts of modern living. After taking this course, students will better understand how and why everyday objects and systems work as they do. Throughout the course, students will build a variety of structures, bridges, and vehicles using various materials. Basic physics concepts needed to best build and complete challenges are also covered.

AV Engineering & Production

Grades 11-12 Full year 1 unit

In this course, students will explore various science fiction movies as templates to develop their own audio and video engineering skills. Students will be introduced to audio engineering platforms such as Logic and ProTools and video production software such as Premier Pro and iMovie.

In this course, students will be required to create their own scripts, direct, film, and edit their own series of short films.

Astronomy

Grades 11-12 Full year 1 unit

Astronomy is a project-based elective science course. In this course, we will research and present on topics including stars and constellations, our solar system, the Milky Way galaxy, the universe, and wild space "stuff" including aliens and space conspiracy theories. Students taking this course should be aware that this course requires in-class completion of projects and in-class student presentations.

Social Studies

The Social Studies Department has designed courses that will help students become well-informed citizens, knowledgeable about America's heritage, and capable of participating in American life as well as the global world. Students are required to earn four credits in social studies in high school and to pass Regents examinations in grades 10 and 11.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Regents Social Studies	Social Studies 6	Social Studies 7	Social Studies 8	Global History & Geography I	Global History & Geography II [R]	U.S. History & Government [R]	Participation in Government [½] Economics [½] SUPA Psychology** SUPA Sociology**
AP Social Studies/ College Prep	Social Studies 6	Social Studies 7	Social Studies 8	Global History & Geography I (Pre-AP)	AP World History [R]	AP U.S. History** [R]	Participation in Government [½] Economics [½] SUPA Psychology** SUPA Sociology**

** College credit courses [½] Half year course [R] Regents course

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

Social Studies 7

Grade 7 Full year 1 unit

This year's study of United States history from pre-Columbian time through the period of Reconstruction is part of a two-year sequence that is completed in grade 8. The seventh-grade program also includes the study of New York state within the framework of U.S. history. Students also learn about the establishment of the U.S. government. Primary sources are emphasized. Instruction in Social Studies skills (i.e., organization, speaking, sequencing, and composition) continues. Students continue to work on writing evidence-based claims and document-based paragraphs.

Social Studies 8

Grade 8 Full year 1 unit

Grade 8 Social Studies continues the chronological study of U.S. history from Reconstruction through the modern day. Students investigate the political, social, geographic, historic, and economic development of the United States in the late 19th and 20th centuries. Primary sources are emphasized. Instruction is provided in writing evidence-based claims, analyzing primary sources and identifying enduring issues. Students will participate in discussion about selected current events. This course will also focus on skills necessary to succeed in high school.

Global History & Geography I: Ancient Civilizations

Grade 9 Full year 1 unit

This is a full-year course on the development of world civilization. The goal of the course is to help students understand the nature of choices and decisions made by past civilizations. The vocabulary and themes of this course provide the foundation for Global History & Geography II – Modern World. The four units of this course are:

- Unit I – Ancient World: Civilizations & Religions (4000 BC–500 AD)
- Unit II – Expanding Zones of Exchange (500–1200 AD)
- Unit III – Global Interactions (1200–1650)
- Unit IV – The First Global Age (1450–1770)

Global History and Geography I (Pre-AP)

Grade 9 Full year 1 unit

This is a full-year course on the development of world civilization. The goal of the course is to help students understand the nature of choices and decisions made by past civilizations. This course is designed to provide students with a foundation of the vocabulary, skills, and themes for Advanced Placement in World History. Upon successful completion of this course, students will have the opportunity to enroll in AP World History during their sophomore year.

The four units of this course are:

- Unit I – Ancient World: Civilizations & Religions (4000 BC–500 AD)
- Unit II – Expanding Zones of Exchange (500–1200 AD)
- Unit III – Global Interactions (1200–1650)
- Unit IV – The First Global Age (1450–1770)

This course fulfills the grade 9 social studies graduation requirement.

Prerequisite: *Course recommendation required (teacher signature)*

Global History & Geography II: Modern World

Grade 10 Full year 1 unit

This course is designed to acquaint students with the physical, economic, social, and political systems of the modern world. The four units of this course are:

- Unit V – Age of the Revolution (1750-1914)
- Unit VI – Crisis and Achievements (1900-1945)
- Unit VII – The Twentieth Century Since 1945 (1945–present)
- Unit VIII – Connections and Interactions within the Modern World

This course prepares students to take the New York State Regents Exam in Global History and Geography at the end of the course.

Prerequisite: *Successful completion of Global History & Geography I*

AP World History

Grades 10-12 Full year 1 unit

This course will make demands on students that are equivalent to those of an introductory college course. Course content focuses primarily on the past thousand years of the global experience from about 1000 C.E. to the present, highlighting changes in international frameworks and comparisons, especially among major non-European societies. This Advanced Placement course prepares students for the AP World History exam and the New York State Global History Regents Exam. Students enrolled in this course will be expected to complete a summer reading program prior to attending this course. Students will also be expected to complete outside assignments and meet in groups outside of class. This course fulfills the grade 10 social studies graduation requirement.

Prerequisites: *Successful completion of Global History I and assigned summer reading; course recommendation required (teacher signature)*

U.S History & Government

Grade 11 Full year 1 unit

This course is designed to acquaint students with the important events in the growth of the United States as a nation. An effort is made to explain the relationships and underlying causes of these events. Included in this course is a detailed study of the Constitution and the basic structure of American government. The study of current events as they relate to the continued development of the nation is also emphasized. A Regents exam is given at the end of this course. Students are required to pass this exam in order to graduate from high school.

Prerequisites: *Successful completion of Global History & Geography I and II*

AP U.S. History & Government

Grades 11-12 Full year 1 unit & 6 college credits

This course will make demands on students that are equivalent to those of an introductory college course. Students will be required to learn how to read historical material analytically and critically, weigh historical evidence, and evaluate various interpretations of history. This Advanced Placement course places heavy emphasis on reading and the writing of short research papers and prepares students for the AP U.S. History examination. Students enrolled in this course will be expected to complete a summer reading program prior to attending this course. Students in this course have the option of concurrently enrolling in HIS 105 and HIS 106 for up to 6 hours of credit from Fulton-Montgomery Community College. This course fulfills the grade 11 social studies graduation requirement.

Prerequisites: *Successful completion of assigned summer reading; course recommendation required (teacher signature)*

FMCC HIS 105: American History I

Grades 11-12 Half year ½ unit & 3 college credits

This course examines the history of the United States, from its origins until reconstruction, with emphasis on the development of a constitutional system. Topics studied include the colonial period, the American Revolution, the ratification of the Constitution, Jacksonian Democracy and the various disputes that led to the Civil War.

Prerequisites: *Successful completion of assigned summer reading; course recommendation required (teacher signature)*

FMCC HIS 106: American History II

Grades 11-12 Half year ½ unit & 3 college credits

This course examines United States history from 1865 until the present. The emphasis is on the social, political and economic development of the country. Attention is also given to the relationship between the United States and the rest of the world. Topics studied include reconstruction, westward expansion, the indus- trial revolution, immigration, the great depression and the ramifications of the cold war.

Prerequisites: *Successful completion of assigned summer reading; course recommendation required (teacher signature)*

Participation in Government

Grade 12 Half year ½ unit

Government and the political process are concerned with decision-making in the United States and the resulting power structures. The influence of interest group politics, political parties, and mass communication on our governmental institutions is stressed in this course, as well as the importance of the individual in the political process.

Prerequisites: *Successful completion of Global History & Geography I and II, as well as U.S. History & Government*

Economics

Grade 12 Half year ½ unit

This course demonstrates the vital role that economics play in our society. Students will evaluate the impact of economic decisions, both on a personal level and as a society, and study both microeconomics and macroeconomics. A basic understanding of the economic process is needed for the student to assume his or her role as an intelligent consumer.

Prerequisites: *Successful completion of Global History & Geography I and II, as well as U.S. History & Government*

SUPA PSY 205: Psychology

Grade 12 Half year ½ unit & 3 college credits

Psychology 205 is an introductory course offered in conjunction with Syracuse University that gives students the opportunity to earn college credit. The course introduces students to the basic areas of study in the field of psychology, including learning, personality assessments, abnormal behavior, social psychology, and psychopathology. Course content increases students' awareness of how the science of psychology can be applied to better understand their own everyday environment. There is a fee for this course that is determined by Syracuse University.

Prerequisites: *Successful completion of Global History & Geography I and II, as well as U.S. History & Government; teacher signature*

SUPA SOC 101: Sociology

Grade 12 Half year ½ unit & 3 college credits

Sociology 101 is an introductory course that provides an overview of the structure and functioning of modern society, with emphasis on major conceptual areas of sociology, such as social organization, culture, socialization, class systems, social institutions and social controls. Case studies of different social groups and the socialization process will be stressed. This course is offered in conjunction with Syracuse University. Writing assignments and research will be graded in order for students to receive a college grade through Syracuse University. There is a fee for this course that is determined by Syracuse University.

Prerequisites: *Successful completion of Global History & Geography I and II, as well as U.S. History & Government; teacher signature*

Technology

Technology education courses are designed to meet the needs of all students and offer a unique opportunity for students to develop skills that will be of value now and in the future. Our department offers several courses in the areas of engineering and other emerging technologies. In addition, we offer Project Lead the Way courses as pathways. Students can take a variety of courses to prepare them for collegiate study and/or career development while learning life skills beneficial to all in the future.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Skilled Trades	PLTW Design & Modeling PLTW Automation & Robotics	**PLTW Gateway:** Computer Science Engineering & Technology Medical/Science of Technology Transportation Engineering		DDP: Introduction to Skilled Trades	Intermediate Woodworking Intermediate Skilled Trades PLTW Civil Engineering & Architecture	Advanced Woodworking	Tiny Homes Building Program
PLTW: Engineering				DDP: Introduction to Engineering	PLTW Civil Engineering & Architecture PLTW Aerospace Engineering	PLTW Principles of Engineering	PLTW Engineering Design & Development
PLTW: Computer Science				PLTW: Computer Science Essentials	PLTW Computer Science Principles	PLTW Computer Science A**	PLTW Cybersecurity**

** College credit courses PLTW electives may vary by year.

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

PLTW Gateway: Computer Science

Grades 7-8 Half year ½ unit

This class introduces computer science with two units. Throughout Unit 1, students will learn about programming for the physical world by blending hardware design and software development. They will design and develop a physical computing device and develop code for microcontrollers that bring their physical designs to life. Physical computing projects will promote student awareness of interactive systems, including Internet of Things (IoT) devices, and broaden their understanding of abstract computer science concepts through meaningful and authentic applications. Unit 2 will expose students to computer science by computationally analyzing and developing solutions to authentic problems through mobile app development, and will convey the positive impact of the application of computer science to other disciplines and to society.

PLTW Gateway: Engineering & Technology

Grades 7-8 Half year ½ unit

An introductory course that examines a multitude of technologies that exist in our world. Through group and individual problem-solving activities, students will explore technology and invention & innovation. Students will develop an awareness of the designed (human-made) world and see the relationships among technologies and other fields of study. Students will learn the design process through brainstorming, modeling, testing, evaluating and modifying a new product, process or system. Safe use of tools and machines will be emphasized throughout the course.

PLTW Gateway: Medical/Science of Technology

Grades 7-8 Half year ½ unit

Science impacts the technology of yesterday, today, and the future. Students apply the concepts of physics, chemistry, and nanotechnology to STEM activities and projects, including making ice cream, cleaning up an oil spill, and discovering the properties of nano-materials.

In the Medical Detectives (MD) unit, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

PLTW Gateway: Transportation Engineering & Technology

Grades 7-8 Half year ½ unit

The exciting world of aerospace comes alive through the Flight and Space (FS) unit. Students become engineers as they design, prototype, and test models to learn about the science of flight and what it takes to travel and live in space. They solve real-world aviation and space challenges and plan a mission to Mars.

Students are challenged to think big and toward the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption.

PLTW: Computer Science Essentials (CSE)

Grades 9-12 Full year 1 unit

Computer Science Essentials is a fun beginner course that will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In Computer Science Essentials, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps, develop websites, and learn how to make computers work together to put their design into practice. They'll apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them.

Prerequisite: *Successful completion of Algebra I*

PLTW: Computer Science Principles (CSP)

Grades 10-12 Full year 1 unit

For students with computer science experience, this course uses Python® as a primary tool. Students learn the fundamentals of coding, data processing, data security, and task automation, while learning to contribute to an inclusive, safe, and ethical computing culture. The course promotes computational thinking and coding fundamentals and introduces computational tools that foster creativity. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

Prerequisite: *Successful completion of Computer Science Essentials*

PLTW: Computer Science A (CSA)

Grades 11-12 Full year 1 unit

Computer Science A is the final course of the computer science progression. Throughout this course experience, students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science A (AP CSA). This endorsement affirms that all components of PLTW CSA's offerings are aligned to the AP Curriculum Framework standards and the AP CSA assessment.

Prerequisites: *Successful completion of Computer Science Essentials and Computer Science Principles*

PLTW: Cybersecurity

Grades 11-12 Full year 1 unit

The demand for cybersecurity is greater than ever, due to an evolving threat landscape with attacks that are more difficult to detect and defend. This course introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy both for themself personally and on larger scales. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. A computer science background is helpful but not required.

Prerequisite: *Successful completion of Algebra I*

DDP: Introduction to Engineering Design (IED)

Grades 9-12 Full year 1 unit & 3 college credits

Introduction to Engineering Design (IED) is a foundation course in the PLTW Engineering Program. Students explore the engineering design process through structured activities, progressing to open-ended projects. The course emphasizes essential skills like planning, documentation, and communication. Through individual and collaborative efforts, students engage in systems thinking, addressing aspects such as material selection, human-centered design, manufacturability, assemblability, and sustainability. Technical proficiency in 3D computer modeling using CAD applications is a focal point. Students create precise 3D-printed engineering prototypes, incorporating student-developed testing protocols to inform decision-making and drive iterative design, cultivating a thorough understanding of engineering principles. The course will culminate with the PLTW EoC Assessment in June. Students can earn 3 college credits through RIT via the PLTW EoC Assessment. This course can fulfill the art/music credit graduation requirement.

PLTW Civil Engineering & Architecture (CEA)

Grades 10-12 Full year 1 unit & 3 college credits

CEA is a high school specialization course in the PLTW Engineering Program. Students will use the engineering design process and a computer-aided drafting program to create small scale house plans that will progress to a built prototype. Students will apply math, science, and standard engineering practices to residential and some commercial projects. Students will learn skills in shop and machine safety, design, drafting, model building, residential/commercial construction and codes, building systems, residential/commercial architecture and design, interior design, and site design and landscaping. The course will culminate with the PLTW EoC Assessment in June. Students can earn 3 college credits through RIT via the PLTW EoC Assessment.

Prerequisite: *Successful completion of DDP: Introduction to Skilled Trades, DDP: Introduction to Engineering Design or DDP: Miniatures and Model-Making*

PLTW Aerospace Engineering (AE)

Grades 10-12 Full year 1 unit

Aerospace Engineering ignites students' learning in the fundamentals of atmospheric and space flight. Aerospace Engineering is one of the specialization courses in the PLTW Engineering program. The course deepens the skills and knowledge of an engineering student within the context of atmospheric and space flight. Students explore the fundamentals of flight in air and space as they bring the concepts to life by designing and testing components related to flight such as an airfoil, propulsion system, and a rocket. They learn orbital mechanics concepts and apply these by creating models using industry-standard software. They also apply aerospace concepts to alternative applications such as a wind turbine and parachute. Students simulate a progression of operations to explore a planet, including creating a map of the terrain with a model satellite and using the map to execute a mission using an autonomous robot.

Prerequisite: *Successful completion of DDP: Introduction to Skilled Trades or DDP: Introduction to Engineering Design*

PLTW Principles of Engineering (PoE)

Grades 11-12 Full year 1 unit & 3 college credits

Project Lead the Way: Principles of Engineering (PLTW PoE) is an advanced engineering course for students who are interested in design and engineering, or want to better understand how and why things work the way they do. The course explores a broad range of engineering disciplines; surveying topics in product development; statics, structure and infrastructure; dynamics, machines and mechanisms; and circuitry, coding and robotics. Each unit culminates with a large design project. Throughout the course students will explore key technologies pertinent to engineering: 3D modeling, simulation software, 3D assembly software, and coding. This engineering course has significant mathematics and physics components to it. The course will culminate with the PLTW EoC Assessment in June. Students can earn 3 college credits through RIT via the PLTW EoC Assessment.

Prerequisites: *Successful completion of Physics or co-enrollment in Physics and a foundation DDP Course.*

PLTW Engineering Design & Development (EDD)

Grades 11-12 Full year 1 unit

PLTW Engineering Design & Development is a capstone course for students who are completing any of PLTW's high school programs. It is an open-ended research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem.

Prerequisite: *Successful completion of the PLTW Engineering sequence*

DDP: Introduction to Skilled Trades

Grades 9-12 Full year 1 unit

This course will introduce students to a variety of skills and careers found in the skilled trades industry. Students will develop basic skills in woodworking, residential wiring, residential plumbing, drafting/prototyping and residential construction. Students will also get exposed to a variety of skilled trades through guest speakers and field trips. This course can fulfill the art/music credit graduation requirement.

Intermediate Woodworking

Grades 10-12 Full year 1 unit

This course is designed to give students an overview of the various areas of the woodworking industry. Students will cover fundamental skills in the design process, planning, measuring and marking, machine and shop safety, joinery methods, lamination and veneering, wood carving, wood bending, table and hand routing, furniture making, computer controlled woodworking and manufacturing.

Prerequisite: *Successful completion of DDP: Introduction to Skilled Trades, DDP: Introduction to Engineering Design or DDP: Miniatures and Model-Making*

Intermediate Skilled Trades

Grades 10-12 Full year 1 unit

This course is designed to build on the previous skills of residential wiring, plumbing, drafting and residential construction. In addition students will learn new skills in finished carpentry and metalworking/welding. Students will also get exposed to a variety of skilled trades through guest speakers and field trips.

Prerequisite or co-requisite: *Successful completion of DDP: Introduction to Skilled Trades.*

Advanced Woodworking

Grades 11-12 Full year 1 unit

This course is designed to build on the previous skills of fine woodworking and furniture making. Students will design and build custom cabinetry and furniture for the Tiny Homes Building Program. Students will also be tasked with building their own custom woodworking project.

Prerequisite: *Successful completion of DDP: Introduction to Skilled Trades and Intermediate Woodworking.*

Tiny Homes Building Program

Grades 11-12 Full year 2 units

This is a two-block capstone course in which students will work in teams to build a tiny home. Through hands-on learning, students develop practical skills useful to homeowners as well as those pursuing careers in construction, architecture, engineering and other building related fields.

Prerequisite: *Successful completion of the Skilled Trades sequence.*

Patriot Academy

Broadalbin-Perth's Patriot Academy is a program dedicated to providing an immersive and engaging education through long-term projects. Our focus is on fostering the development of 4 Core Skills: Critical Thinking, Communication, Collaboration, and Creativity. The Academy promotes an inspiring and exploratory learning environment, offering every student the opportunity to discover and cultivate their passions through interdisciplinary projects and problem/project-based learning settings.

Program	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Academy	Ignite the Spark exploratory program	*Students will participate in Academy for two blocks per day (Blocks 1 & 2)* Compass & Cause (service) Innovator: Computer Science & Engineering I Creative Fusion Foundations of Business Academy English 9 Global History & Geography I^ Algebra I^ Elective^	*Students will participate in Academy for two blocks per day (Blocks 1 & 2)* Compass & Cause (service) Advanced: Computer Science & Engineering II Academy Arts & Culture PACE: Competition Exploration Academy English 10 Global History & Geography II^ Geometry^ or other math course Science course^	Compass & Cause (service) PACE: Competition Exploration Academy English 11 U.S. History^ Algebra II^ or other math course Science course^ Electives^	Compass & Cause (service) PACE: Competition Exploration English 12 or English 103** Participation in Government^ Economics* Personal Finance* Work-Based Learning* Science course* Electives*
Accelerated Academy	Ignite the Spark exploratory program Living Environment Algebra I English 9	Compass & Cause (service) Innovator: Computer Science & Engineering I Creative Fusion Foundations of Business Academy English 10 Global History & Geography I^ Algebra I^ Elective^	Compass & Cause (service) Advanced: Computer Science & Engineering II Academy Arts & Culture PACE: Competition Exploration Academy English 11 AP Global History^ Algebra II^ Elective or science course^	Compass & Cause (service) PACE: Competition Exploration English 12 or English 103** AP U.S. History^** Pre-Calculus^** Science course^ Electives^	Compass & Cause (service) PACE: Competition Exploration English 104^** Public Speaking^** Participation in Government^ Economics^ Personal Finance^ Work-Based Learning^ AP Calculus^** Electives^

^ Course will be taken outside of the Patriot Academy

** College credit courses PLTW electives may vary by year.

Ignite the Spark: An Introduction to the Patriot Academy

Grade 8 Half year

Ignite your curiosity and spark your potential in "Start the Spark: An Introduction to the Patriot Academy!" This eighth-grade course is a launchpad to Broadalbin-Perth's immersive academic adventure into the Patriot Academy program. Dive into a hands-on blend of STEM, art, service, and character development. Discover your passions through engaging projects that unleash your critical thinking, communication, collaboration, and creativity — the four cornerstones of the Patriot Academy. Get ready to explore, create, and make a difference. Your path to the Patriot Academy begins here.

Weaving Words into Worlds: Patriot Academy English Language Arts

Grades 9-11 Full year 1 unit

In the Patriot Academy, English Language Arts isn't just a class — it's the thread that weaves creativity, communication, and critical thinking into everything you do. You'll dive into project/problem-based learning that fuses writing, research, analysis, and communication into every challenge. ELA is not a standalone subject but seamlessly integrates into all Academy disciplines. It highlights specific examples of how language skills are applied in different settings, all while adhering to the New York State Common Core Learning Standards.

Prerequisite: *Member of the Patriot Academy*

Compass & Cause: Navigate Your Impact Through Service and Character

Grades 9-12 Full year 1 unit

Students will choose their service path, track their progress on Passport for Good, and make a difference in the community. Alongside engaging lessons and activities, students will build essential character traits, deepen their sense of belonging, and find their purpose as a changemakers. Students will navigate their impact with clarity and compassion — discover themselves, serve others, and leave their mark on the world.

Prerequisite: *Member of the Patriot Academy*

Unleash Your Inner Innovator: A Journey into Computer Science and Engineering

Grade 9 Full year 1 unit

Exploring the fundamentals of computer science and engineering, this introduction encompasses various areas like programming & robotics, artificial intelligence, structures, space & flight/rockets, and the Patriot Academy's four C's: Communication, Collaboration, Creativity, and Critical Thinking. Hone your problem-solving and critical thinking skills to become a future innovator.

Prerequisite: *Member of the Patriot Academy*

Creative Fusion: Exploring Art in the STEAM Universe

Grade 9 Full year 1 unit

Students focus on materials and techniques of contemporary fine arts with an emphasis on exploration, independence, and technology. Students will also cultivate the Academy four C's by collaborating and competing in the statewide Olympics of the Visual Arts.

Prerequisite: *Member of the Patriot Academy*

Empowering Young Entrepreneurs: Foundations of Business

Grade 9 Full year 1 unit

This course equips students with the essential knowledge and skills needed to navigate the dynamic world of business, preparing them for future academic and professional endeavors. Through interactive learning experiences, students will explore essential areas such as marketing, accounting, legal principles, and management, gaining practical skills applicable in real-world scenarios.

Prerequisite: *Member of the Patriot Academy*

Beyond the Horizon: Deep Dive into Advanced Computer Science and Engineering

Grade 10 Full year 1 unit

Build upon your computer science and Engineering foundations with advanced topics like artificial intelligence, machine learning, drones, structures, sustainable energy/wind turbines, and the Patriot Academy's four C's: Communication, Collaboration, Creativity, and Critical Thinking. This course pushes the boundaries of problem-solving and critical thinking as you tackle real-world challenges.

Prerequisite: *Member of the Patriot Academy*

Academy Arts and Culture

Grade 10 Full year 1 unit

While continuing their exploration of fine arts and technology, students will also investigate themes and concepts related to historical and contemporary issues. Students cultivate the Academy four C's by exploring topics such as board game fabrication and alternative process art in addition to competing in the statewide Olympics of the Visual Arts.

Prerequisite: *Member of the Patriot Academy*

P.A.C.E: Patriot Academy Competition Exploration

Grades 10-12 Full year 1 unit

This dynamic course empowers you to forge your own path to competitive excellence. Choose from a number of competition possibilities and prepare to strategize, innovate, and push your boundaries as you step onto the competitive stage, ready to showcase your talent and leave your mark. Are you ready to rise to the challenge?

Prerequisite: *Member of the Patriot Academy*

World Languages

The World Languages Department provides students with an awareness of and sensitivity towards the cultural and linguistic diversity of an increasingly interconnected world. Language courses offer an exciting academic and cultural experience for students. Through these courses students will be empowered to experience the richness of the world and to take advantage of global opportunities for individual growth and world citizenship. Language proficiency can make the difference in obtaining challenging and exciting employment in business and industry, government, engineering, education and international organizations. All language courses focus on the four basic communicative skills—listening, speaking, reading and writing—with an emphasis on vocabulary and structure.

Program	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Spanish	Spanish 8	Spanish II	Spanish III	FMCC Intermediate Spanish I** (Spanish IV) FMCC Intermediate Spanish II** (Spanish V)	Spanish VI** Spanish VII**
Mandarin Chinese		Mandarin I	Mandarin II	Mandarin III	

** College credit courses LOTE electives may vary from year to year

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

World Languages Graduation Requirements

- Students who enter high school are required to have one (1) unit of credit in a world language to earn a Regents Diploma. Students who did not pass a Checkpoint A Examination in Grade 8 must pass a high school world language course to fulfill the graduation requirement.
- Students pursuing a Regents Diploma with Advanced Designation must complete three (3) units of study of a world language and pass a Comprehensive Checkpoint B Examination.
- Students pursuing a Regents Diploma with Advanced Designation may select a five-unit pathway in Occupational (Career and Technology) Education, Art or Music in lieu of a three-unit sequence in World Languages. HOWEVER, these students are still required to fulfill one (1) unit of high school credit in world languages to fulfill the graduation requirement.

Spanish 8

Grade 8 Full year 1 unit

This is a full-year course and the first step in the language sequence for Spanish. The curriculum includes the study of vocabulary and structures from the NYS Syllabus for Modern Language topics. Students work toward proficiency in the four communication skills. Communication in the target language and knowledge of the target of culture are stressed.

Spanish II

Grade 9 Full year 1 unit

This is a full-year course and the second step in the language sequence in Spanish. This course continues to emphasize all four communication skills bringing the students to a stronger level of proficiency. Students will start to be able to express themselves beyond simple phrases and structures. Cultural understandings and sensitivities continue to be developed.

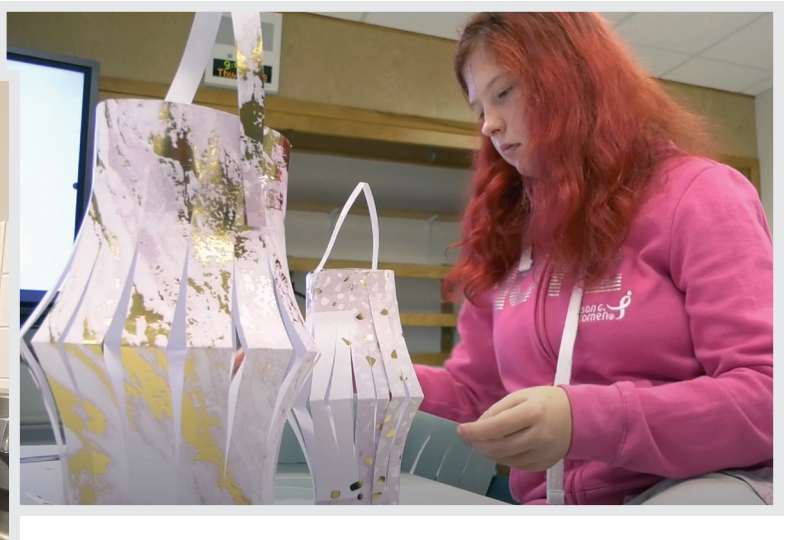
Prerequisite: *Completion of Spanish 8 or one year of Spanish*

Spanish III

Grade 10 Full year 1 unit

This course furthers the study of grammar, vocabulary, and cultures of Spanish-speaking countries. Students improve listening, speaking, reading and writing skills. Students further develop reading comprehension skills through literature, oral presentations, and written exercises.

Prerequisite: *Completion of Spanish II or two years of Spanish*



Spanish IV: Intermediate Spanish I (FMCC)

Grades 11-12 Half year ½ unit & 3 college credits

The student will develop language proficiency to the intermediate low-to-mid level and will increase knowledge of the cultures and cultural practices of Spain and Latin America. Multimedia course materials — including text, audio, and video — are used as the basis for comprehension and communication.

Prerequisite: *Completion of Spanish III or three years of Spanish*

Spanish V: Intermediate Spanish II (FMCC)

Grades 11-12 Half year ½ unit & 3 college credits

This course reinforces and further develops intermediate-level grammar, syntax, and communication skills. It also examines a variety of Hispanic cultures, political events, and social experiences.

Prerequisite: *Completion of Spanish IV or 3.5 years of Spanish*

Mandarin 8

Grade 8 Full year 1 unit

Mandarin 8 is a full-year course focusing on introductory Chinese language and culture. Students will learn the basics of simplified Chinese, including Pinyin and tones, the evolution of Chinese characters, stroke order, radicals, and introductory greetings and conversations. Students should be able to articulate some geographical basics as well as popular areas of interests. Major holidays will be explored. Following the NYS and ACTFL standards of learning, students will explore all four modalities of communication and express their knowledge through a teacher-created Checkpoint A Exam.

Mandarin II

Grade 9 Full year 1 unit

Mandarin II is a full-year course focusing on the next phase of learning simplified Chinese in efforts to demonstrate mastery on the Checkpoint B Exam at the end of grade 10 (Mandarin III). Students will continue to explore Chinese characters and vocabulary focusing on topics related to themselves. Students will explore new cultural topics and holidays that were not studied in Mandarin I or revisit prior topics at a more in depth level. Students are given more liberty to study at their own pace, be enriched, and explore topics of interest to them.

Prerequisites: *Completion of Mandarin I and passing Checkpoint A Exam*

Mandarin III

1 Unit / Full Year / Grade 10

Mandarin III is a full-year course focusing on the next phase of learning simplified Chinese in efforts to demonstrate mastery on the Checkpoint B Exam at the end of the school year. Students will continue to explore more Chinese characters and vocabulary focusing on topics related to themselves, understanding how to negotiate meaning with other Chinese language speakers and read authentic texts to accomplish a real task. Students will also be able to read texts in Chinese and begin to compose lengthier writing tasks. Students will have the opportunity to explore areas of Chinese language and culture they find interesting and present their findings to their peers and teacher.

Prerequisites: *Completion of Mandarin II and passing Checkpoint A Exam*

Health & Physical Education

Physical Education is a New York State-mandated course requirement. Students must successfully complete eight semesters during their high school experience, the equivalent of 2 credits. At Broadalbin-Perth, the Physical Education Department strives to guide students in positive directions, enabling them to develop competency and proficiency in their physical abilities. The Physical Education Department provides students with opportunities to interact with peers and become engaged in activities that promote lifetime fitness.

The health education curriculum is responsive to the needs of students enrolled in the class and is focused on developing skills that will enhance all dimensions of their health as a teenager and as an adult. Students are required to take a half credit of health in junior high school and another half credit of health in high school for graduation.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Physical Education	Physical Education	Physical Education	Physical Education	Physical Education Unified Physical Education	Physical Education Unified Physical Education	Physical Education Unified Physical Education	Physical Education Unified Physical Education
Health	Health 6	Babysitting	Babysitting	Health Project Learn Coaching	Athletic Training I** Project Learn Coaching	Athletic Training I** Project Learn Coaching	Athletic Training I** Project Learn Coaching

** College credit courses Health and Physical Education electives may vary from year to year

Note: *These progressions are typical progressions; however, students can talk to their counselor about customizing or switching between standard and accelerated progressions at any time.*

Health

Grades 9-12 Half year ½ unit

This course will help students develop and enhance skills that will enable them to live healthfully in an ever-changing environment. Students participate in relevant learning experiences that incorporate planning and goal setting, stress management, decision making, communication and advocacy with topics such as nutrition, sexual health, substance abuse, and injury and violence prevention.

Babysitting

Grades 7-8 Half year ½ unit

The Babysitting class will offer students the opportunity to learn the skills and responsibilities of child care. Many students already babysit, or are interested in babysitting to earn money. Students will complete the necessary requirements to obtain a babysitting certification through the Red Cross. They will learn life-saving CPR/First AID as well as the responsibilities of a babysitter.

Coaching

Grades 9-12 Half year ½ unit

This class will give students the opportunity to learn and apply life long skills through coaching. Sports play a major role in the health of many individuals. They benefit and impact all dimensions of health. Many students experience these benefits from an athlete's perspective. This class will give them the opportunity to experience another side of sports. Coaches guide individuals to be their best selves, both athletically and in the world at large. This class will provide students with the tools necessary to be future leaders and inspirations.

Project Learn

Grades 9-12 Full year 1 unit

Project Learn is a physical education/strength training program that is designed to give interested students and athletes training programs to improve their athletic ability and their overall fitness.

Physical Education 7-8

Grades 7-8 Full year

Students are required to take physical education each semester. This course develops skills and provides knowledge for physical fitness and enjoyment of physical activity. Activities presented to students include conditioning and body mechanics, self-testing activities, games, organized team sports, as well as skill and knowledge tests. In addition to the daily physical education program, students can further their interest in the interscholastic athletic program.

Physical Education 9-12

Grades 9-12 Full year ½ unit

Students are required to take physical education each semester of high school. This course develops skills and provides knowledge for physical fitness and enjoyment of physical activity. Activities presented to students include conditioning and body mechanics, self-testing activities, games, organized team sports, as well as skill and knowledge tests. In addition to the daily physical education program, students can further their interest in the interscholastic athletic program.

Unified Physical Education

Grades 9-12 Full year ½ unit

Unified Physical Education is an opportunity for students of varying ability levels and backgrounds to come together on equal terms through ongoing fitness, sports, leadership and wellness activities. This course focuses on the physical, intellectual and social growth of all participants.

Engaging in physical activity and sport alongside peers with and without disabilities helps to foster important social relationships. Students can apply the skills learned and bonds created during Unified Physical Education courses, such as becoming more active and working together as a team to the broader arena of Special Olympics. Students participating in Unified Physical Education courses may have the opportunity to attend Special Olympics competitions and/or leagues with surrounding schools.

Athletic Training I (FMCC)

Grades 10-12 Half year ½ unit & 3 college credits

Utilizing the principles of athletic training, students will learn to apply skills relative to injury prevention, evaluation, management, and rehabilitation. Students will participate in the athletic training room and on the sidelines under the direction of the certified athletic trainer. At the completion of this course students will be able to develop a basic understanding of the historic foundations of athletic training, comprehend how sports nutrition affects athletic performance, identify specific skeletal anatomy, muscles, ligaments, tendons, and joints of the body and emphasis of the lower extremity areas starting with the foot working up to the hip will be an area of focus. In addition, students will be able to acquire knowledge and skills to treat basic sports injuries, recognize and provide emergency care, understand the procedures and responsibilities associated with managing an athletic training room as well as the importance of injury prevention as it relates to athletics.

Fine Arts

The Fine Arts/Visual Arts/Media Arts Department provides a sequence of progressions that students may customize at any time. A five-unit art sequence may be used instead of a LOTE sequence for an Advanced Regents Diploma. One high school music or art credit is requited for graduation.

Program	Gr. 6	Gr. 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Art	Art 6	Art 7		Studio Art DDP: Introduction to Engineering Design DDP: Miniature and Model Making Studio in Design Observational Painting Observational Drawing	Observational Painting Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Observational Drawing Visual Communication & Design Stagecraft	Observational Painting FMCC Ceramics** Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Stagecraft Observational Drawing Visual Communiation & Design Photography	Observational Painting FMCC Ceramics** Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Stagecraft Observational Drawing Visual Communication & Design Photography
Accelerated Art	Art 6	Art 7	Studio Art DDP: Introduction to Engineering Design DDP: Miniature and Model Making Studio in Design	Observational Painting Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Observational Drawing Visual Communication & Design	Observational Painting FMCC Ceramics** Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Stagecraft Observational Drawing Visual Communication & Design Photography	Observational Painting FMCC Ceramics** Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Stagecraft Observational Drawing Visual Communication & Design Photography	Observational Painting FMCC Ceramics** Studio in Sculpture: 3D Modeling Mold Making & Casting Animation & Moving Image Stagecraft Observational Drawing Visual Communication & Design Photography

** College credit courses Fine Arts electives may vary from year to year

***Note:** One high school music or art credit is required for graduation. Studio Art or any DDP course fulfills the state's minimum requirements. Most art electives are offered every other year.*

DDP: Introduction to Engineering Design

Grades 8-11 Full year 1 unit

Introduction to Engineering Design (IED) is a foundational course in the PLTW Engineering Program. Students explore the engineering design process through structured activities, progressing to open-ended projects. The course emphasizes essential skills like planning, documentation, and communication. Through individual and collaborative efforts, students engage in systems thinking, addressing aspects such as material selection, human-centered design, manufacturability, assemblability, and sustainability. Technical proficiency in 3D computer modeling using CAD applications is a focal point. Students create precise 3D-printed engineering prototypes, incorporating student-developed testing protocols to inform decision-making and drive iterative design, cultivating a thorough understanding of engineering principles.

***Prerequisite:** Teacher signature required for 8th graders*

Studio Art

Grades 8-11 Full year 1 unit

This is a foundation-level course that is approved to meet the graduation requirement that all students take one unit of art or music. Students are introduced to the fundamentals of artistic expression. The courses include experiences in drawing, painting, two-and three-dimensional design, and sculpture. The courses emphasize observation and interpretation of the visual environment, visual communication, imagination, and symbolism through an introduction to various visual arts media

Prerequisite: *Teacher signature required for 8th graders*

DDP: Miniature and Model Making

Grades 8-11 Full year 1 unit

Miniature and Model Making is a foundational course that navigates the intersection between precision and artistic expression. Students explore thematic ideas through projects such as crafting miniature landscapes, exploring computer aided design software, experimenting with diverse materials, and creating movement in objects. The course offers a creative and hands-on experience, fostering a balance between artistic expression and technical skills, the course also delves into the realms of 3D modeling and printing and construction-based tool use.

Prerequisite: *Teacher signature required for 8th graders*

Studio in Design

Grades 8-12 Full year 1 unit

This is a foundational course. The focus will be on both skill-building and project-based work. Freedom to choose subject matter and medium will vary widely by unit, with some units allowing a high degree of self-direction and other units much less so. Students who may not be as comfortable with self-directed work can opt for more structured projects for those given units.

Prerequisite: *Teacher signature required for 8th graders*

Visual Communication & Design

Grades 10-12 Full year 1 unit

The focus of Visual Communication & Design will be on project-based work solving real-world communication problems. Projects will always contain significant restrictions or requirements and students will be expected to work within those constraints. Students should also expect to create multiple versions of their work, receive feedback, and revise their work for every project.

Students will engage in:

- Studying exemplar graphic design and illustration work from a wide variety of historic and contemporary sources;
- Using an ideation process from brainstorming and sketching through development, reflection, revision and presentation;
- Critical thinking on how the combination of text, design elements, and images communicates a message (or doesn't!); and
- Use of both traditional and digital mediums over the course of the year.

Students should have a strong interest in graphic design and illustration. Interest in or knowledge of digital programs is helpful but not required.

Prerequisite: *Successful completion of a foundation visual arts course*

Observational Drawing

Grades 9-12 Half year ½ unit

The focus of Observational Drawing will be on project-based work and will include some degree of freedom in choosing subject matter while achieving specific technical goals in a given medium and accurately representing their subject. Class activities will include:

- Studying exemplar artworks from genres including landscape painting, scientific/technical illustration, still life and more;
- Using an ideation process from brainstorming and sketching through development, reflection, revision and presentation;
- Learning to capture details and proportions of a scene, plant, animal or person accurately through real life observation and/or photography-based processes; and
- Exploration of and skill-building in various drawing and painting mediums.

Students should have a strong interest in creating art based on direct observation of real life objects and scenes.

Prerequisite: *Successful completion of a foundation visual arts course*

Observational Painting

Grades 9-12 Half year ½ unit

The focus of Observational Painting will be on project-based work and will include some degree of freedom in choosing subject matter while achieving specific technical goals in a given medium and accurately representing their subject. Class activities will include:

- Studying exemplar artworks from genres including landscape painting, scientific/technical illustration, still life and more;
- Using an ideation process from brainstorming and sketching through development, reflection, revision and presentation;
- Learning to capture details and proportions of a scene, plant, animal or person accurately through real life observation and/or photography-based processes; and
- Exploration of and skill-building in various drawing and painting mediums.

Students should have a strong interest in creating art based on direct observation of real life objects and scenes.

Prerequisite: *Successful completion of a foundation visual arts course*

Mold Making, Casting and Reproduction

Grades 10-12 Full year 1 unit

Mold-making and casting techniques are a fundamental skill in the creation and production of singular and multiple objects. Within this class students will learn foundational skills in the following areas: Rubber and silicone molds for detailed reproduction, the life casting processes in which molds are created from the human body and used in the special effects industry, ceramic slip casting, and 3D printing.

Prerequisite: *Successful completion of a foundation visual arts course*

Animation & Moving Image

Grades 10-12 Full year 1 unit

Animation & Moving Image courses will explore the creative and conceptual aspects of designing and producing animated images for storytelling and multimedia presentations including dramatic narratives; artistic and experimental presentations and installations; and ambient, interactive, immersive and performance media. Topics may include motion graphics, compositing, and visual effects within 2D and 3D animation.

Prerequisite: *Successful completion of a foundation visual arts course*

FMCC Ceramics

Grades 11-12 Half year 1 unit & 3 college credits

Ceramics/pottery courses engage students in a sequential learning experience that encompasses the history of ceramics, critiquing their own work and the work of others, aesthetic inquiry, and creative production. Experience includes, but is not limited to, clay modeling, hand building, coil building, casting, and throwing on the potter's wheel. Students develop a working knowledge of kiln firing and glazing techniques

Prerequisite: *Successful completion of a foundation visual arts course*

Stagecraft

Grades 10-12 Half year ½ unit

Stagecraft is a collaborative course that offers a hands-on exploration of the world of theatrical design. Throughout the semester, students will delve into essential building techniques, from basic carpentry skills to the finer points of prop creation. The course emphasizes collaboration, fostering a creative community where students work together to bring their design concepts to life. Stagecraft is a repeatable course, encouraging students to return for subsequent semesters to further hone their craft and take on new challenges. It is highly recommended that students have a strong interest in theater, fine art or the skilled trades.

Studio in Sculpture: 3D Modeling

Grades 10-12 Full year 1 unit

In this course, students will dive into the essentials of 3D design using cutting-edge software such as AutoCAD Fusion and Blender. Throughout the curriculum, participants will explore both sculptural and industrial design processes, honing their skills in crafting intricate and visually stunning three-dimensional digital models. The course goes beyond the virtual realm, incorporating hands-on experiences with 3D printing technologies, including filament and resin printers. Students will learn how to translate their digital designs into physical objects, gaining insights into the nuances of different printing materials and methods. Additionally, the course will introduce students to the exciting possibilities of laser cutting tools, further expanding their capabilities in materializing their creative visions.

Prerequisite: *Successful completion of a foundation visual arts course*

Commercial Photography

Grades 10-12 Half year ½ unit

Commercial Photography is a half-year introduction to the digital camera as an art-making tool designed for students at the beginning level. The course will use digital photography to help students learn and apply the basic elements of art and the principles of design. This course will also provide students with opportunities to extend their knowledge and skills in the field of photography and the use of Adobe Photoshop and Lightroom. Digital Photography will familiarize the student with digital photographic equipment, materials, methods, and processes. Visual problem solving skills are explored through the use of the computer as the main tool for creative expression and communication.

Prerequisite: *Successful completion of a foundation visual arts course*

Art History: Conflict and Activism

Grades 10-12 Half year ½ unit

Conflict and Activism is a half-year art history class delving into the intersection of art and social change. Throughout the course, students explore various art movements that have been instrumental in conveying messages of activism and resistance. The curriculum spotlights the role of art as a powerful medium for expressing and challenging societal conflicts. From visual representations of political unrest to poignant pieces advocating for change, students examine the diverse ways artists contribute to activism through their work. This class provides a unique lens for understanding the impact of art on social consciousness and its ability to catalyze transformative movements. This course is for students interested in history.

Art History: Mythology in Visual Culture

Grades 10-12 Half year ½ unit

Mythology in Visual Culture is an art history course that immerses students in the rich tapestry of myths as depicted across various visual mediums. From traditional art to contemporary cinema, the curriculum examines the dynamic interplay between mythology and visual representation. Drawing inspiration from Joseph Campbell's work and archetypal analysis, students explore how myths transcend time and culture, influencing artistic expression. The course delves into the transformative nature of myth in shaping narratives across different periods and genres, allowing students to discern recurring archetypes in art and cinema. By critically analyzing the evolution of myth in visual culture, students gain a profound understanding of how ancient stories continue to shape and inspire contemporary artistic endeavors. This course is for students interested in literature and mythology.

Music

The Music program at Broadalbin-Perth provides students the opportunity to find a richer life by guiding them to a better understanding of music. There are courses for students who are interested and skilled in vocal or instrumental performance and wish to concentrate in these areas. Students who are not performing musicians, but wish to learn more about music, will find valuable courses to choose from.

Program	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
Band	Grade 6 Band	Grade 7 Band Red, White & Blue Band Introduction to Music Performance	Grade 8 Band Red, White & Blue Band	Band Guitar Techniques Piano Techniques Red, White & Blue Band	Band FMCC Music Theory** Guitar Techniques Piano Techniques Songwriting & Production Red, White & Blue Band	Band FMCC Music Theory** AP Music Theory** Guitar Techniques Piano Techniques Songwriting & Production Red, White & Blue Band	Band FMCC Music Theory** AP Music Theory** Guitar Techniques Piano Techniques Songwriting & Production Red, White & Blue Band
Chorus	Grade 6 Chorus	Grade 7 Chorus Introduction to Music Performance	Grade 8 Chorus	Chorus Piano Techniques Guitar Techniques	Chorus FMCC Music Theory** AP Music Theory** Songwriting & Production Guitar Techniques Piano Techniques	Chorus FMCC Music Theory** AP Music Theory** Songwriting & Production Guitar Techniques Piano Techniques	Chorus FMCC Music Theory** AP Music Theory** Songwriting & Production Guitar Techniques Piano Techniques

** College credit courses

Note: *One high school music or art credit is required for graduation. Band, chorus, or any other music course fulfills the state's minimum requirements.*

Introduction to Music Performance

Grade 7 Half year

Introduction to Music Performance is an introductory course that focuses on playing the ukulele, bucket drums, drumset, keyboard/piano, and guitar. You will not have enough time to become a rockstar, but you will leave the class being able to play a few songs on each instrument! In addition to learning how to play, you will be introduced to reading music, new musical genres, and careers in the music field.

Concert Band Grades 7 & 8

Grades 7-8 Full year

Jr. High Concert Band provides an opportunity for students to improve on their major instrument and perform as a member of an ensemble. Concert Band will rehearse every other day and is included on each student's class schedule. Concert band members will also receive more individualized instruction through small group lessons. Lessons are approximately once a week and the schedule rotates to prevent students from missing too much time in any one class. Band members are expected to practice at home to reinforce the skills they have learned. Band members are also required to participate in three concerts each year and two parades in the spring.

Prerequisite: *At least one year of band experience in elementary school or junior high school*

Concert Chorus

Grades 7-8 Full year

Jr. High Chorus provides an environment for students to diversify their knowledge of music and improve vocal techniques in small and large group settings. Chorus members are required to participate in all scheduled activities and rehearsals. During class time, students will work on solfege and repertoire to prepare for in-person concerts. Students will also have time to work on building their individual performance skills, such as sight-reading, solfege, music theory, and composition.

Concert Band

Grades 9-12 Full year 1 unit

Band provides an environment for students to improve on their major instruments in a large group setting. They will work together as a team to prepare diverse literature for performance. Band members are required to participate in all scheduled activities and attend lessons. High school members are also required to participate in marching band.

Small group lessons give students individualized attention on their primary instruments. They meet once a week on the same day but during a different period. This prevents missing too much time in any one class. It is the responsibility of each student to check with teachers for missed work. Lessons are required by all band members.

Prerequisite: *Successful completion of Concert Band in grades 7 or 8 or Red, White, and Blue Band*

Concert Choir

Grades 9-12 Full year 1 unit

The Senior High Concert Choir provides an environment for students to diversify their knowledge of music and improve vocal techniques in small and large group settings. Choir members are required to participate in all scheduled activities and rehearsals. During class time, students will work on solfege and repertoire to prepare for in-person concerts. Students will also have time to work on building their individual performance skills, such as sight-reading, solfege, notation, ear training, music theory, and composition. Prior participation in the junior high concert chorus is recommended.

Red, White, and Blue Band

Grades 7-11 Full year 1 unit

Are you ready to rock?!? The RWB Band has been designed to help students starting out fresh on an instrument fast-track into the band program with only one year of lessons. Students will meet as a large group during advisory and will focus on team building, musicianship, and the ongoings of the band program. All instruments are welcome!

Songwriting & Production

Grades 9-12 Full year 1 unit

Songwriting & Production prepares students for the modern music industry. Students learn how to compose and perform their own songs using music theory and ear training, analyze and critique others songs, and gain and demonstrate knowledge of song styles and history, song form and terminology, and modern music technology. The end goal is to record, produce, and market an original collaborative album.

Prerequisite: *Course recommendation (teacher signature)*

Piano Techniques

Grades 9-12 Full year 1 unit

This course is designed to stimulate student growth in piano and teach the necessary concepts and fundamentals to go along with performance. While performing on the piano is the primary goal of this class, the basics of music theory, such as notation, rhythm, melody, and harmony, will also be learned. Students will develop the self-discipline needed for good practice habits as they prepare for class performances. Students will also learn pieces based on their current level of experience and pieces to strive for.

Guitar Techniques

Grades 9-12 Full year 1 unit

This course is designed to teach musicianship skills through guitar techniques. It is designed to provide instruction in guitar technique which includes basic music theory (music-notation literacy, scale and chords, etc.), finger picking, playing in groups, as well as care and maintenance of the guitar. Public performances are scheduled according to the progress and abilities of the group and individuals as determined by the instructor.

FMCC Music Theory

Grades 10-12 Half year ½ unit & 3 college credits

The primary goal of introduction to music theory is to create an understanding of the technical, stylistic, and expressive, elements of music. Topics to be covered include music fundamentals as well as elements of pitch, elements of rhythm, triads, diatonic chords, seventh chords, and modes. Students will gain a better understanding of the language and essentials of music through concise lessons, practice music reading and writing skills, and improve aural skills.

Prerequisite: *Course recommendation (teacher signature)*

AP Music Theory

Grades 10-12 Half year ½ unit

AP Music Theory is meant to further an advanced understanding of music theory in preparation for the AP Exam. Topics covered in FMCC Music Theory go into further detail and explore their uses in 18th century style part-writing, arranging, and composition. Students will also develop more advanced aural skills to hear more complex melodies, chords, scales, orchestration, and musical devices.

Prerequisites: *Successful completion of Music Theory (FMCC) and course recommendation (teacher signature)*

Business Education

The Business Education Department provides an excellent opportunity for students to begin to develop the 21st Century skills, abilities, and understandings that will allow them to handle many professional and personal business affairs upon graduation. These course offerings include a variety of learning experiences that will give students the basic skills and knowledge to be a successful participant in today's society as a consumer, a citizen, and an employee. Whether they are planning to continue their formal education in college, at a vocational trade school, in the military, or enter directly into the workforce, the skills and abilities learned in these elective courses will be a valuable asset.

Program	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
General Business	Business 8	Sports & Entertainment Marketing Social Media Marketing	Career & Financial Management Computer Applications Sports & Entertainment Marketing Social Media Marketing	FMCC Business Communications** FMCC Entrepreneurship** FMCC Marketing** FMCC Principles of Business** FMCC Accounting** FMCC Quantitative Business Application** Computer Applications	FMCC Business Communications** FMCC Entrepreneurship** FMCC Marketing** FMCC Principles of Business** FMCC Accounting** FMCC Quantitative Business Application** Personal Finance Computer Applications
Work-Based Learning			Job Shadowing	Work-Based Learning/Internship	Work-Based Learning/Internship

** College credit courses Business electives may vary from year to year

Personal Finance

Grade 12 Half year ½ unit

Personal Finance is a graduation requirement for all students graduating from the Broadalbin-Perth Central School District. The course focuses on various topics such as banking, credit, paying for college, budgeting, investing, taxes, and insurance. Students are given many "real life" situations and will develop responsible financial values and learn how they contribute to an ever-changing economy.

Career and Financial Management

Grades 10-11 Half year ½ unit

In Career and Financial Management, students learn transferable skills essential to all occupations. They will be given the opportunity to explore various occupational areas and make consumer decisions, gain an understanding of how to manage money, and handle risk management.

Computer Applications

Grades 10-11 Half year ½ unit & 3 college credits

This course provides an introduction to microcomputers and end-user systems/application software. The personal computer is demonstrated as a tool to support other academic or professional disciplines. Topics include basic computer hardware, operating systems, the Internet, word processing software, spreadsheet software, and presentation graphics software. The course emphasizes familiarization with computer components and the operation of the overall computer system.

Prerequisite: *Teacher signature*

Sports & Entertainment Marketing

Grades 9-10 Half year ½ unit

The Sports and Entertainment Marketing field offers careers that combine entertainment with traditional marketing, but with a whole lot more excitement. Explore basic marketing principles while delving deeper into the multibillion dollar sports and entertainment industry. Learn how professional athletes, sports teams, and famous entertainers are marketed as commodities and how the savvy people who handle these deals can become very successful. This course will show you exactly how things work behind the scenes of a major entertainment event and how you can be part of the act. Topics include marketing basics, consumer behavior, pricing, promotion and public relations, products, distribution, and building a dream stadium.

Social Media Marketing

Grades 9-10 Half year ½ unit

Students explore principles, strategies, tools, and tactics related to consumers, branding, advertising, and promotions through social media platforms. This course will emphasize ethics as well as careers in digital and social media marketing. Hands-on projects will provide experiential learning opportunities related to students' career goals and/or interests. Topics include social media landscape, social media platforms overview, understanding your audience, and marketing of each type of social media platform (Facebook, Twitter, Instagram, TikTok, etc.).

Work-Based Learning: Career Exploration Internship Program

Grade 12 Full year 1 unit

The work-based learning program offers students an opportunity to gain 54 classroom hours with 108 internship hours embedded into the school day. This course allows students to get familiar with an industry before graduation through on-site exploration and experiential learning. Topics of focus within work-based learning include but are not limited to diversity in the workplace, sexual harassment, workplace attire, professional emails, business ethics, business law, resumes, interviews, etc.

FMCC BUS 137: Business Communications

Grades 11-12 Half year ½ unit & 3 college credits

The Business Communications course puts emphasis on composing various types of business communications in a clear and concise manner while maintaining the readers' goodwill. Also, this course offers students a review of grammar and the mechanics of writing, spelling, and some public speaking.

Prerequisite: *Teacher signature*

FMCC BUS 101: Principles of Business

Grades 11-12 Half year ½ unit & 3 college credits

In Principles of Business, students will learn the language of business, multiple areas of study, and career opportunities that are available to business majors. The course covers topics including, but not limited to, entrepreneurship, marketing, management, human resources, economics, global business, accounting and finance.

Prerequisite: *Teacher signature*

FMCC BUS 120: Essentials of Entrepreneurship

Grades 11-12 Half year ½ unit & 3 college credits

Essentials of Entrepreneurship is designed for students who are considering becoming an entrepreneur or working for a small business. The course will emphasize: exploring opportunities, the business plan process, and the challenges of entrepreneurship. It will include an overview of the following business concepts: sales, marketing, building customer relationships, accounting, and management.

Prerequisite: *Teacher signature*

FMCC BUS 141: Marketing

Grades 11-12 Half year ½ unit & 3 college credits

In this course, the focus will be on gaining familiarity with the variety of environmental factors that influence marketing decisions and understanding the importance of a customer-oriented philosophy of doing business. Topics covered in this course include determining marketing opportunities, environmental analysis, consumer buying behavior, and product planning, promotion, distribution, and pricing. Additionally, the importance of market research is discussed.

Prerequisite: *Teacher signature*

FMCC BUS 115: Quantitative Business Applications

Grades 11-12 Half year ½ unit & 3 college credits

In this course, students will learn to use financial calculators and spreadsheets to analyze and solve challenging everyday problems faced by business managers and owners, including but not limited to: amortization schedules, computation of simple and compound interest, inventory cost-flow assumptions, financial and tax based-depreciation reporting, time value of money, and payroll compliance. (This course varies per year)

Prerequisite: *Teacher signature*

FMCC ACC 101: Financial Accounting

Grades 11-12 Half year ½ unit & 3 college credits

Financial Accounting is a course that will explore topics that include analysis of business transactions in accordance with accrual basis accounting, the accounting cycle, financial statement preparation, and analysis, the hallmarks of internal control, and coverage of accounting elements such as assets, liabilities, equity, and revenue and expenses.

Prerequisite: *Teacher signature*

Career & Technical Education

HFM Career & Technical Education offers students an avenue for career exploration and enrichment through practical learning applications. Juniors and seniors from HFM BOCES component school districts who are interested in pursuing career training as part of their high school experience are eligible to attend. Students enrolled in CTE programs are provided the knowledge, skills and credentials needed to succeed in college and the workplace. We welcome students of all academic and experiential abilities to explore our program opportunities.

Auto Body Repair

Students in HFM Auto Body Repair program learn to repair and refinish damaged vehicles with I-Car Advance Tech Training.

They also learn high-tech welding methods, flexible and rigid plastic repair, as well as how to make damage appraisals, calculate repair costs and establish estimates.

Auto Technology

HFM's NATEF/ASE certified automotive technology program prepares students for a career in the automotive field through the use of state-of-the-art tools and equipment. The Automotive Tech program involves instruction of theory and operation of various automotive systems. The program includes hands-on shop activities to practice diagnosing, fixing and maintaining a wide variety of vehicles.

Throughout the year, students interact and participate in several live demonstrations by industry professionals. Similar to a contemporary work environment, students contribute to the maintenance of a clean, safe and efficient automotive laboratory.

Construction Technology

Through building projects on campus, students are exposed to a variety of construction trades including residential construction, blueprint reading and estimating, building materials and tools, surveying, foundation, floor wall and roof systems, insulation, window and door installation, home electrical wiring, and energy use analysis. Particular attention is paid to modern framing techniques and other "green" building strategies .

Cyber Security & Computer Technology

Cybersecurity & Computer Technology program includes coursework in the following areas: Cybersecurity, Information Technology (IT) Essentials, and the CISCO Certified Entry Networking Technician (CCENT) curriculum. In addition to the main coursework, there is also introductory curriculum in computer programming.

Cosmetology

The HFM Cosmetology program provides students with the professional skills necessary to pass the practical and written components of the New York State Licensing Board Examinations. Only licensed cosmetologists may work in salons in New York State. To qualify for the licensing exam, students must complete a minimum of 1,000 hours of approved instruction.

Criminal Justice

A two year program focusing on civil and criminal law, emergency tactics, patrol function, crime prevention and detection equipment, fingerprinting, investigation methods, client contract and business management.

Culinary Arts & Hospitality

A program certified by the National Restaurant Association and the American Culinary Federation and features the ProStart and ACF ACCESS curricula. Students learn about nutrition, food preparation and dining room operation and can earn the nationally recognized ServSafe Sanitation certification.

Digital Multimedia and Communications

For students interested in web design, multimedia communications, graphic design and other related areas. During the two-year program students develop professional level skills in Adobe software applications. They learn to apply design processes and design theory in order to improve the quality and consistency of their work. In addition to digital output, the classroom lab provides specialty printing experiences including wide format poster and banner printing, dye sublimation printing on metal, ceramics and textile as well as t-shirt transfer printing, Students demonstrate their technical abilities through the Adobe Certified Expert program. In a two-year period, it is possible for students to earn up to five industry recognized certifications.

Environmental Conservation

This two-year program stresses career preparation in Forestry & Lumber Production, Heavy Equipment Operation and renewable resources.

Students' core curriculum familiarizes them with the tools of the trade. Students learn to operate our fleet of bulldozers, excavators, loaders and other heavy equipment as well as learn to operate power tools, welders, and other shop equipment.

Foundations of Food and Safety

Students in the Foundations of Foods program will learn basic entry level skills ideal for employment in the culinary industry. Students will receive both traditional classroom instruction and hands-on training. The program includes the following modified elements of ProStart (National Restaurant Association developed curriculum): training in safety practices for all equipment used in the kitchen environment; good work habits; professional sanitation techniques; basic knife skills; and standard culinary practices.

Medical Assisting

Medical assistants perform administrative and clinical tasks to assist in the effective office operations of doctors, hospitals, clinics and other health care providers. This program will enable students to develop a specialized body of knowledge and skills which prepare them to work in the emerging health care field.

New Visions Education

Senior year only

New Visions Education is an academically rigorous one-year program intended for students interested in pursuing a career in the K-12 education field. Through the program, students will gain field experience working in various local school districts. Students will have the opportunity to explore different career paths through extended job shadowing and internships working with classroom teachers, school psychologists, counselors, social workers and special education teachers.

New Visions Health Careers

Senior year only

This academically rigorous one-year program, located at Nathan Littauer Hospital, is designed for high school seniors interested in medical and health-related professions. Students enrolled learn through traditional methods (lecture/discussion, reading and research, writing and specific topic study) as well as participation in clinical rotations—structured observations of medical professionals and procedures.

Robotics and Engineering Technology

This rigorous program is a collaborative partnership with HFM BOCES, Fulton-Montgomery Community College (FMCC), and the National Science Foundation to create career opportunities for students in the field of robotics and engineering technology. Students will receive STEM (Science, Technology, Engineering, and Mathematics) instruction focusing on career exploration in current and emerging technologies. Students will also apply college-level Algebra, Physics, and Engineering principles to develop systematic approaches to problem-solving and critical thinking skills.

Skilled Trades Program: Electrical, HVAC and Plumbing

Senior year only

This program is for high school seniors interested in careers in the electrical, HVAC (heating, ventilation, and air conditioning), and plumbing fields.

Why consider a career in the skilled trades? These fields offer many high-paying job opportunities for high school graduates, and employers report they'll need even more skilled tradespeople in the future. Projections show the national job growth rate in these trades will be approximately 25 percent over the next six years with median salaries ranging from $45,000 to $68,000. Currently, industry experts estimate there is a shortage of approximately 2 million craft professionals nationwide. Completion of this one-year, technical-based program will give graduates a competitive edge for jobs right out of high school with contractors and labor unions in all three of these skilled trades.

Veterinary and Animal Science

Students in this two-year program prepare for a future in the expanding animal industry, which offers a variety of career opportunities. This science-based program teaches skills in areas such as animal handling, anatomy and physiology, grooming, first aid, health and disease, clinical practices, veterinary terminology, and safety and sanitation. Students have the opportunity to work with small animals in the classroom and large animals through partnerships with local agribusinesses. They will learn basic care and handling with a range of species including cows, horses, sheep, goats, rats, rabbits, guinea pigs, hamsters, dogs, and cats. Students will use the tools of the trade, including diagnostic and grooming equipment. Internships with local veterinary clinics, animal shelters, farms, grooming and training facilities are also part of the experience.

Steps to Four Year Planning

1. Establish personal goals for yourself and understand what values you have. Even though your goals may change, you should have some specific educational and career objectives.
2. Honestly evaluate your personal strengths, interests, aptitudes, and needs. Use your BP Naviance account and explore interest inventories, career inventories, and personality assessments under the discovery tab. These assessments will provide detailed personalized results with helpful information that matches you with potential careers.
3. Meet with your school counselor to learn more about the typical admissions requirements for the type of college you are interested in. If you plan on going into the workforce or military discuss potential internships, job shadowing experiences and opportunities the military can offer you.
4. Take part in information nights, college fairs, and visit the colleges and Career and Technical Vocational Opportunities through HFM BOCES. Attend our career talks and college trips scheduled by school counselors.
5. Consult with your parents, teachers, and counselors to benefit from their experiences and the information they can make available to you. Talk with others in the community who are working in the professions or vocations you are considering. We have an outstanding work-based learning program that can link you to internships and job shadowing.
6. List the courses you would like to include in your high school study program. Choose those that will contribute most toward helping you achieve your goals. Think also about courses that will enrich your life and those that will provide you with useful skills as an adult.
7. Select courses so your course load will be balanced throughout your four years of high school. The recommendation of credits per year is between 6.5 and 7.5.

Broadalbin-Perth Graduation Requirements

Regents Diploma

Course Requirements — 23 credits required

English	**4 credits**
Social Studies • 2 credits of Global History & Geography • 1 credit of U.S. History & Government • ½ credit in Participation in Government • ½ credit in Economics	**4 credits**
Mathematics	**3 credits**
Science • 1 credit in a Life Science • 1 credit in a Physical Science • 1 credit in a Life or Physical Science	**3 credits**

Health	**½ credit**	**Foreign Language**	**1 credit**
Personal Finance	**½ credit**	**Physical Education**	**2 credits**
Art, Music, or Technology	**1 credit**	**Electives**	**4 credits**

Testing Requirements — Score of 65+

English Language Arts Regents Exam	**1 exam**
Social Studies Regents Exam	**1 exam**
Mathematics Regents Exam	**1 exam**
Science Regents Exam	**1 exam**

And one of the following:

- A score of 65+ on a fifth Regents exam in Social Studies (Humanities Pathway), Math (STEM Math Pathway) OR Science (STEM Science Pathway).
- A state-approved Career and Technical Education assessment/pathway (the list is available from BOCES).
- C-DOS Pathway/Career Plan — 216 hours CTE coursework plus 54 of those hours in a work-based learning experience plus the completion of an Employability Profile. The 54 hours do not need to be in the same program of the coursework.

Regents Diploma with Honors Endorsement

Student achieves a Regents diploma with a computed average of 90% or above on the 5 (or 4 if CTE/CDOS) required Regents exams as referenced in the Regents Diploma reuirements.

Regents Diploma with Advanced Designation

Course Requirements: All of the requirements for a Regents Diploma plus students must also choose from one of the following:

World Languages	**2 credits**
Art, Music, or Career Technology Education (CTE) sequence	**5 units**

Testing Requirements — Same as under Regents Diploma except:

Global History & Geography and U.S. History & Government Regents Exams	**2 exams**
Mathematics Regents Exams	**3 exams**
Life Science and Physical Science Regents Exams	**2 exams**
World Languages Checkpoint B Exam	**1 exam**

Advanced Regents Diploma with Honors Endorsement

Student achieves a Regents diploma with a computed average of 90% or above on the 8 required Regents exams.

Four-Year Planning Worksheet

Note: All shaded areas are REQUIRED subjects.

Student's Name: _____ **Class of** _____ (Graduation Year)

Type of Diploma Desired: _____

Career & College Goals: _____

Counselor: _____ **Date:** _____

9th Grade	Units
English	1
Global History & Geography I	1
Math: _____	1
Science: _____	1
Phys. Ed.	½
Music/Art: _____	1
Total Units	

10th Grade	Units
English	1
Global History & Geography II	1
Math: _____	1
Science: _____	1
Phys. Ed.	½
Health	½
Total Units	

11th Grade	Units
English	1
US History & Government	1
Math: _____	1
Science: _____	1
Phys. Ed. 11	½
Total Units	

12th Grade	Units
English	1
Economics & Participation in Government	½ ½
Phys. Ed. 12	½
Personal Finance	½
Total Units	

NOTES

NOTES

Mark Brooks, Jr./Sr. High School Principal

Adam Barnhart, Sr. High School Assistant Principal

Erica Darling, Jr. High School Assistant Principal

School Counseling Team

518-954-2620

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