## Mayfield Junior-Senior High School


$\mathcal{A l l}$ students can learn.

# Course Selection Guide 2019-2020 

27 School Street
Mayfield, New York 12117
(518) 661-8200
http:// www.mayfieldk12.com/hs

## CONTENTS

| General Topics | Page(s) |
| :--- | :--- |
| Telephone Directory of Key People | 1 |
| Graduation Requirements | 2 |
| Grade Promotion | 3 |
| College Credit | $4-5$ |
| Course Levels | 4 |
| Academic Help | 5 |
| Help with Other Problems | 5 |
| Clubs | 6 |
| Sports | 6 |
| National Honor Society | 6 |
| Course Weighting Policy | 28 |
| Course Descriptions |  |
| Art | $7-8$ |
| Business | $8-9$ |
| Career and Technical Training | $23-26$ |
| Distance Learning | $21-23$ |
| English | $10-11$ |
| Foreign Language | $11-13$ |
| Health | 13 |
| Mathematics | $13-14$ |
| Music and Performing Arts | $15-16$ |
| Physical Education | 16 |
| PTECH | 27 |
| Science | $16-18$ |
| Social Studies | $18-20$ |
| Technology | $20-21$ |

## MISSION STATEMENT

The school community of Mayfield Central School has the power and desire to make positive differences in the lives of our students. Therefore, the mission of the Mayfield Central School is to ensure that all students will acquire the academic and social skills to enable them to function successfully as productive, law-abiding, adaptable citizens in our society. This endeavor is a partnership between the school and the home which incorporates the principles of a safe and orderly environment, a climate of high expectations for success for all students, strong instructional leadership, frequent monitoring of students' progress and effective home-school communication. At the Mayfield Central School, all students can learn.

## KEY PEOPLE TO HELP YOU

| Principal | Dr. Christopher Wojeski | $661-8200$ |
| :--- | :--- | :--- |
| Assistant Principal | Mr. Matthew Lewis | $661-8200$ |
| High School Office Secretary | Mrs. Marcia Guzielek | $661-8200$ |
| School Counselor | Ms. Cindy Farrell | $661-8215$ |
| School Counselor | Ms. Joelle DiDomenico | $661-8214$ |
| Guidance Office Secretary | Mrs. Kristie Edwards | $661-8213$ |
| Director of Student Services | To be determined | $661-8274$ |
| CSE Secretary | Ms. Tammie Aesch | $661-8274$ |
| School Psychologist/Part-time | Mrs. Joan Bobbette | $661-8226$ |
| District Psychologist | Mrs. Lauren Lozier | $661-8281$ |
| School Nurse/Attendance | Ms. Janine Kilpatrick | $661-8211$ |
| School Social Worker | Mrs. Andrea Bovee | $661-8295$ |
| Transportation | Ms. Leta Aldous | $661-8217$ |
| Food Services Manager | Mrs. Lindsay VanAuken | $661-8210$ |
| Athletic Director | Mr. Jon Caraco | $661-8203$ |
| District Superintendent | To be determined | $661-8207$ |
| Superintendent's Office | Ms. Debra Javarone | $661-8207$ |
| Student Activities Accounts | Mrs. Marcia Guzielek | $661-8200$ |

To contact a teacher or coach, please call the High School Office. They will have the teacher return your call.

## WHAT DO I NEED TO TAKE TO GRADUATE?

| Subject Area | Credits Required |
| :--- | :---: |
| English | 4 |
| Social Studies | 4 |
| Math | 3 |
| Science | 3 |
| Foreign Language (LOTE) | 1 |
| Health | .5 |
| The Arts | 1 |
| Physical Education | 2 |
| Electives | 3.5 |
| Total | 22 |

Testing Requirements (score of 65 or above) for a Regents Diploma:

- English Language Arts Regents Exam
- Algebra I Regents Exam
- One Social Studies Regents Exam (Global History or US History)
- One Science Regents Exam (typically Living Environment)
- Choice of one pathway below:
- Humanities - requires a second Social Studies Regents Exam
- The Arts - requires an approved NYSED assessment in the area of The Arts (music, art, dance, theatre)
- Bi-literacy - requires an approved Checkpoint $B$ exam in a foreign language (LOTE) following three years of instruction
- STEM - requires an additional Math Regents Exam (Geometry or Algebra II) or an additional Science Regents Exam (Earth Science, Chemistry or Physics)
- Career and Technical - requires an approved certification exam within a Career Education program

An integrated course in Mathematics/Science/Technology, such as Accounting, Math Finance or Computer Programming, may be used as the third required unit of credit in math or science for a Regents Diploma only.

Testing Requirements (score of 65 or above) for a Regents Diploma with Advanced Designation:

- English Language Arts Regents Exam
- Algebra Regents Exam
- Geometry Regents Exam
- Algebra II Regents Exam
- Global History Regents Exam
- US History Regents Exam
- Living Environment Regents exam
- One additional Science Regents exam (Earth Science, Chemistry or Physics)
- Checkpoint B Foreign Language (LOTE) exam (this exam can be substituted with 5 credits in one area of the arts or business or a two year career and technical program from the Career and Technical Center)
- What action did the Board of Regents take concerning the safety net for students with disabilities?

Students with disabilities can use the safety net to earn a Local high school diploma in place of a Regents diploma under certain conditions. A score of 45-54 on a required Regents exam (except ELA and Algebra) can be compensated by a score of 65 or above on another required Regents exam. In all cases, students must achieve a score of 55 or above on the ELA and Algebra Regents exams. In addition the student must pass the course in which s/he earned a score of $45-54$ and have satisfactory attendance.

## Will local districts still be able to award a student a Regents diploma with Honors or a Regents diploma with Advanced Designation with Honors?

Yes. A local school district may award a Regents diploma with Honors or a Regents diploma with Advanced Designation with Honors to students who achieve a combined average of 90.0 percent on all Regents examinations required for the diploma.

Will local districts be able to award a student a Regents diploma or a Regents diploma with advanced designation with an annotation of mastery in mathematics and/or science, or with a technical endorsement?

Yes. Students who complete all course work and testing requirements for the Regents diploma with Advanced Designation, and who pass with a score of 85 or better, three commencement level Regents exams in mathematics and/or three commencement level Regents exams in science, will earn a Regents diploma with Advanced Designation, with an annotation on the diploma that denotes mastery in mathematics and/or science, as applicable. A local school district may award a student a Regents diploma, or a Regents diploma with an Advanced Designation, with an affixed technical endorsement awarded upon completion of an approved career and technical education program.

## HOW IS A STUDENT PROMOTED FROM ONE GRADE TO THE NEXT?

## 7-12 Promotion and Grade Level Determination (Policy 4750)

The SED cohort system tracks student progress toward attainment of graduation requirements by the calendar year of entrance into ninth grade, which each school district determines. Students remain in the cohort when they pass Regents exams earlier than customary and stay in the cohort when they fail Regents exams in subsequent years. The reporting of data has become increasingly complex. In any given year, a number of students may have courses from different grade levels, depending upon prior achievement. The purpose of this policy is to set benchmarks for the determination of grade level assignments.

- A student must pass English 7 and Social Studies 7 in order to be promoted to the eighth grade. In the event a student fails only Math 7 or Science 7 that student will be promoted to the eighth grade, but will have to repeat and pass the failed course.
- A student must pass English 8 and Social Studies 8 in order to be promoted to the ninth grade. In the event a student fails only Math 8 or Science 8 that student will be promoted to the ninth grade, but will have to repeat and pass the failed course.
- A student must pass English 9, Global History 9, one high school math course, a high school science course and the Foreign Language proficiency (or the second year of study) to be promoted to the tenth grade.
- A student must pass English 10, Global History 10, the Global History Regents Exam, and the Algebra I Regents exam to be promoted to the eleventh grade.
- A student must pass English 11 and the ELA Regents exam, US History and Government and the US History and Government Regents exam, one Science Regents exam, the Algebra I Regents exam and have earned a minimum of 16 units of study to be promoted to the twelfth grade.


## DO I GET A CHOICE FOR THE REQUIRED COURSES IN HEALTH AND THE ARTS?

There is a one-semester high school level Health course that all students must take. For the Art requirement you may choose one unit from among the specified course(s) listed under Art, Business, Music and The Performing Arts.

## WHOM SHOULD I ASK ABOUT COURSES?

Your school counselor and teachers of subjects you are interested in are primary sources of information on courses. These staff members, as well as your parents, can help you determine post-secondary options and career interests. Putting all of this information together will help you select high school courses that will maximize your possibilities.

## WILL ALL COURSES LISTED IN THIS GUIDE BE HELD?

A course may be cancelled if only a few students sign up for it or if it cannot be staffed. If a course you selected is cancelled, your school counselor will contact you to select another course.

## WILL MY ATTENDANCE IMPACT MY COURSE GRADES?

The Mayfield Central School District has adopted a Comprehensive District Attendance Policy that complies with Section 104.1 of the Regulations of the Commission of Education. Copies of the complete Mayfield CSD Comprehensive Attendance Policy are available upon request in the main office and the Superintendent's office. Ensuring that your child attends school regularly is important to your child's academic success. Excessive absences can hinder a student's progress and the district's ability to provide for his/her educational needs. If your child is absent for three or more days consecutively, please obtain a doctor's note and provide the school with a copy.

Students with more than twelve daily absences will be ineligible to take a weighted high school class (such as an AP class or a College in the High School class) that is not required for the Advanced Regents diploma type.

## CAN I CHANGE CLASSES AFTER THE START OF THE SCHOOL YEAR?

Students should think carefully when selecting courses and should consult with parents, school counselors and teachers when making their schedule. Yearly credit and course requirements as established by the Board of Education must be met. Students in grades seven through eleven must maintain a yearly schedule with at least six and a half course credits. Seniors are required to take five and a half credits in a school year.

Student schedules for the upcoming school year will be available on the student and parent portals a week before school starts. Any changes should be made prior to the beginning of the school year with written parent permission. No schedule changes will occur after school begins, therefore, all students and parents should carefully consider the choices being made in course selection. These guidelines are set forth in order to provide the highest quality educational experience for each of our students and to ensure adequate class size and teacher load based on initial course requests.

## WHAT ELECTIVES CAN I TAKE?

All courses, elective and required, are described later on in this guide. In general, try to include courses that continue your study in existing areas and that introduce you to possible new interests.

## WHAT LEVELS OF COURSES ARE AVAILABLE?

Different levels of some courses are offered to meet the needs of all, but not all courses have different levels of instruction. The levels are:

## Regents

These classes are college preparatory and adhere to the New York State Regents curriculum, followed by a comprehensive Regents exam at its completion. These courses are necessary to earn a Regents diploma.

## Advanced Placement

AP classes allow students to pursue college level work in high school and are academically rigorous in comparison to a typical high school course. College requirements may be waived based upon a successful grade on the Advanced Placement test given every May for the particular subject. Therefore college credit is not guaranteed by just passing the course. The AP level is available in Biology and United States History.

## College Credit

While enrolled in a high school class, students can be concurrently enrolled in various "College in the High School Programs" earning college credits at a reduced rate of tuition, reducing the number of credits (and hence years of study) needed for their college degree while demonstrating the ability to handle college level work.

Listed below are the Mayfield courses that allow students the opportunity to concurrently enroll for college credit through Fulton Montgomery Community College - also including the corresponding college course name, course prefix and course number:

- English 103 -- English I (ENG 103)
- English 104 -- English II (ENG 104)
- AP US History - Survey of American History I and II (HIS 105 and HIS 106)
- College Government - American Political Systems (POL 101)
- Algebra II - Intermediate Algebra (MAT 120)
- College Pre-calculus - Pre-calculus (MAT 140)
- College Calculus -Calculus I (MAT 170)
- AP Biology - General Biology II (BIO 171)
- Anatomy and Physiology -Essentials of Anatomy and Physiology (SCI 136)
- Regents Physics - Intro to Physics (SCI 161)
- Spanish IV - Intermediate Spanish I (SPA 201)
- Spanish V - Intermediate Spanish II (SPA 202)
- Elementary Italian I - Elementary Italian I (ITA 101)
- Elementary Italian II - Elementary Italian II (ITA 102)
- Advanced Studio Art - Studio Art (ART 101)
- Accounting - Financial Accounting (ACC 101)
- Math and Financial Applications - Quantitative Business Applications (BUS 115)
- Principles of Business - Principles of Business (BUS 101)
- Spreadsheets and Databases - Spreadsheets and Databases for Professionals (CIS 110)
- Programming Logic and Design - Programming Logic and Design (CIS 115)

Mayfield courses that allow students the opportunity to concurrently enroll for college credit through Syracuse University Project Advance (SUPA) - also including their corresponding Syracuse course name, prefix, and course number:

- SUPA Psychology - Foundations of Human Behavior (PSY 205)

Mayfield courses that allow students the opportunity to concurrently enroll for college credit through Rochester Institute of Technology (pending a certain course and final exam grade) - also including their corresponding RIT course prefix and course number:

- Introduction to Engineering Design- CAST- PLTW-101-88
- Principles of Engineering - CAST- PLTW-102-88

Many of the two-year Career and Technical Programs students can take in their junior and senior years at the Career and Technical Center in Johnstown offer articulated college credit. See the last two pages of this guide for more specific information.

## DO I GET CREDIT FOR EVERY COURSE?

In general, all courses offer credit if the student successfully completes the course requirements. There are some courses students must take that do not give credit. They are designed to give students instruction that will help them be successful in school. Some of these courses include Academic Intervention Services (AIS), Regents Review, Literacy and Study Lab.

## HOW MANY CREDITS ARE REQUIRED EACH YEAR?

Ninth, tenth and eleventh grade students are required to carry $61 / 2$ scheduled credits each year. Seniors are required to carry $51 / 2$ scheduled credits per year. Some courses may be non-credit-bearing but would be for the benefit of the student.

## HOW DO I GET EXTRA HELP IN MY COURSES?

All teachers provide extra help for their students on a daily basis. It is best when you take the initiative to ask your teachers for extra help. If necessary, you will be assigned extra help by your teacher or an administrator during the school day.

## HOW DO I GET HELP WITH OTHER KINDS OF PROBLEMS?

Start by letting one of the school counselors know that you have a problem and want to speak about it. There are programs and people in the school to provide understanding, support and direction. The school cooperates with several agencies in the surrounding area that provide specific kinds of help for different problems.

## WHAT CLUBS/ORGANIZATIONS ARE AVAILABLE AND HOW DO I JOIN?

There are studies that show that successful adults are more likely to have participated in co-curricular and extracurricular outlets and athletics when they were in high school. Outside of athletics, Mayfield offers a variety of clubs for all different interests and we encourage participation.
Builder's Club
Brainstorm
Class Council (for each grade)
Drama Club (acting and tech)
Guitar Club
Hope and Wellness Club
Jazz Band
Key Club

Masterminds<br>Mural Club<br>National Honor Society<br>Outdoor Club<br>Paw Perfection<br>Post Prom<br>Student Council<br>SPARRK<br>Yearbook

Meeting times and dates are announced on the public address system each morning. Jazz Band and Drama require an audition, but there are jobs within drama such as promotions, direction, tech crew and set design that do not require an audition. In order to run for student government students need to get 25 signatures on a nomination petition.

## WHAT SPORTS CAN I GO OUT FOR AND HOW DO I JOIN?

Mayfield competes in the Western Athletic Conference at the modified, junior varsity and varsity levels for boys and girls in the following sports:
Fall
Soccer
Cross-Country Running
Golf
Volleyball (Girls)
Swimming (Girls)
Winter
Cross-Country Skiing
Basketball
Cheerleading
Bowling
Swimming (Boys)

Spring
Track and Field
Baseball (Boys)
Softball (Girls)
Swimming (Girls)
Swimming (Boys)
Speak with the coaches or physical education teachers one full season before the team you wish to join so that you know when sign-ups occur. Speak with the school nurse to make sure that you know the dates and times of physicals. All athletes must have a physical examination completed by the school physician before they are eligible to practice.

## HOW DO I BECOME ELIGIBLE FOR NATIONAL HONOR SOCIETY?

Students qualify academically for nomination to the National Honor Society by maintaining a cumulative high school grade point average of 90.0 without any rounding up, as of the midway point of the junior year. Students must also demonstrate documented community service, leadership and character through an application process for selection to the National Honor Society. Eligible students will be notified of their academic eligibility for NHS by the chapter advisor in writing in early February of their junior year. Those eligible students will be advised on how to create an application packet. The Principal appoints a Faculty Council to review application packets and select students for membership. The induction ceremony is held in the spring of the school year. The NHS group functions as a student activity organization, engaging in community service and social functions.

## WHAT KIND OF POST-SECONDARY PLANNING IS AVAILABLE?

The school counselors coordinate post-secondary planning efforts. Every freshman and sophomore will participate in a Career Exploration Program that incorporates Career Cruising software with a career interest inventory to explore career interests, values and aptitudes. There is also an orientation for sophomores interested in vocational training through the Career and Technical Center. Juniors can take the PSAT to jumpstart their college search process. College Planning Lessons are held for juniors and includes lessons on the college selection and search process, picking a major, developing a college resume, college course scheduling and an introduction to financial aid. Individual junior and senior planning conferences are also held to address individual needs. Students are also encouraged to take the College and Career Readiness course taught by our business teacher and integrated with activities with the guidance staff.

## COURSE DESCRIPTIONS

## ART

Art, Music and Performing Arts courses satisfy the arts requirement for graduation. Five courses in art can replace the three unit foreign language requirement for the Regents Diploma with Advanced Designation.

| Studio Art | 1 Unit |
| :--- | :--- |
| Clay Ceramics | $1 / 2$ Unit |
| Sculpture | $1 / 2$ Unit |
| Basic Computer Media Arts | 1 Unit |
| Advanced Media Arts | 1 Unit |
| Advertising Art | $1 / 2$ Unit |
| Drawing | 1 Unit |
| Painting | 1 Unit |
| Advanced Studio Art | 1 Unit |
| Arts in Business | 1 Unit |

## STUDIO ART

1 Unit
Open to students entering grade 9 and above
If you like art and want to learn the basics then this is the course to take. This is a foundational course where students become familiar with tools, media, expression in art, and art philosophy. Students will also explore the foundations in drawing, painting and graphics. This course is strongly recommended prior to taking other art courses.

## CLAY CERAMICS

½ Unit
Open to students entering grade 9 and above
Clay is fun! This course is designed for the student who is interested in working with three-dimensional forms and with clay. Students learn the nature of clay and make clay creations through hand building, molds, and the use of the potter's wheel. Preference will be given to students completing a sequence in art.

## SCULPTURE

## 1/2 Unit

Open to students entering grade 9 and above
Working with clay, wood, paper, stone or other inanimate objects, students are introduced to basic design principles, layout and composition as applied to three-dimensional subjects. Students increase their spatial awareness as well as imagination. Sculptures will be both realistic and abstract.

## ARTS IN BUSINESS

Open to students entering $9^{\text {th }}$ grade as a part of the Arts in Business pathway
This is an introduction class to the Arts in Business pathway for students who wish to learn about different art career paths and learn what those careers have to offer by doing fun assignments similar to those in the business world. Students will learn and experience projects related to Digital Photography, Advertising/Marketing, Fashion Design, Interior Design, Furniture Design, Graphic Design, and more. Students will also have the opportunity to directly interact with and hear from companies that employ people with these art skills through school visits and field trips.

BASIC MEDIA ARTS
1 Unit
Open to students entering grade 9 and above
Like digital photography? Want to create and edit cool videos? Want to enhance photos using computers or Google apps? This course includes basic digital photography, graphic design, video production, and the use of computers/Chromebook Apps to create fine and commercial art.

ADVANCED MEDIA ARTS
1 Unit
Open to students who have passed Basic Media Arts
This course will further help students become "career and college ready" in the Electronic Media Arts and Digital Photography fields. Students will enhance their skills in digital photography, graphic design, video production, and the use of computers/Chromebook Apps to create fine and commercial art. Prerequisite: Studio Art, BEMA or by teacher recommendation.

In this half year course students will learn about how art is used in the media (to sell products and services and to share information). Artwork in this class will be geared towards creating eye-catching posters and different sized advertisements using various art media such as colored pencil, markers, paint and pastels, as well as the computer.

## DRAWING

1 Unit
Open to students who have passed Studio Art
This is an advanced course that focuses on exploring new techniques of drawing and building up existing drawing skills. Students will do several long term drawing assignments over the course of the year and will be working in charcoal, pencil, pastels, pen and ink, and will learn how to draw more realistically.

## PAINTING

## 1 Unit

Open to students who have passed Studio Art
If you want to learn how to paint better, but don't know how, this course is for you! This course will explore the basics of different painting mediums including acrylic, ink, watercolor, and oil paint. Students will use the principles and elements of art to paint creative compositions. Assignments will include portraits, landscapes, still life, surrealism, and abstract painting techniques.

## ADVANCED STUDIO ART

1 Unit and 3 possible college credits
Open to students entering grade 11 and above who have teacher recommendation
Want college credit for art? Want to continue working on your own style or skills? This course is for you. This course is geared toward students who want to explore a concentration in art. The focus will be on producing a concentration of work in a variety of media (drawing, painting, sculpture). Students will be able to include this artwork in their portfolio required for college admission. There is an option for students to get college art credit in Studio Art (ART 100) for this course through FMCC at a reduced rate of tuition. Students can take this class for or not for college credit

## BUSINESS

There are many practical and useful business electives students can choose. Career and Financial Management is a recommended half year course for all students to take before graduation.

| Career and Financial Management | $1 / 2$ Unit |
| :--- | ---: |
| Marketing and Social Media** | $1 / 2$ Unit |
| Coding for Beginners* | $1 / 2$ Unit |
| College and Career Readiness | $1 / 2$ Unit |
| Accounting**\# | 1 Unit |
| Math and Financial Applications* \# | 1 Unit |
| Principles of Business | 1 Unit |

*course offered alternating years and will be offered in the 2019-2020 school year
${ }^{* *}$ course offered alternating years and will NOT be offered until the 2020-2021 school year
\#course can be used as a third year math credit for the Regents diploma requirement

## CAREER AND FINANCIAL MANAGEMENT <br> ½ Unit

Open to students entering grade 9 and above
During this half year course, students will complete several hands-on projects using the computer. Students start the course off by exploring occupations and career paths. Students learn how to evaluate themselves so that they can make good career decisions. The second component is a simulation that teaches financial responsibility. Students learn to use a checkbook, budget money, and make good financial decisions. Every student can benefit from this course and the real world skills it provides.

Students will learn about the processes involved in marketing (how companies take a concept and get it to a customer, understanding the aspects of product development, pricing and promotion). Students will then learn how marketing has changed in the Digital Age as businesses use social media platforms to develop their brand, increase awareness, and increase sales. Students will also develop ways to use social media to market their own business ideas.

## CODING FOR BEGINNERS

½ Unit
Open to students entering grade 9 and above
Course offered alternating years and will be offered in the 2019-2020 school year
Interested in gaming, programming, or just computers in general? In this half year course students learn to program their own interactive stories, games, and animations and share their creations with others in an online community. This is a beginner's level course; there is no prior knowledge to app development and programming needed. Students will use different programs and apps including Scratch throughout the course of the semester. Scratch is a "learn to program" app that helps young people learn to think creatively, reason systematically, and work collaboratively - essential skills for life in the 21st century.

## COLLEGE AND CAREER READINESS 1⁄2 Unit

Open to students entering grade 10 and above
The purpose of this half year fall semester course is to help prepare students for "life" after high school. Students will learn how to select college majors based on their interests and abilities, research various college options and use effective transitioning techniques into college such as development of good study skills, discipline and goal setting, as well as an understanding of academic, social and personal responsibilities. The second portion of this course will focus on workforce readiness skills. These skills include reading workplace documents, career-ready math skills, and problem-solving and situational judgment.

## ACCOUNTING

## 1 Unit and 4 possible college credits

Open to students entering grade 10 and above
Course offered alternating years and will not be offered until the 2020-2021 school year
Students learn about the keeping of business and financial records. Course content encompasses the complete accounting cycle. Upon completion of this course, students should be able to keep a simple set of books. Students planning to work in a business or to major in business in college will find this course very beneficial. This course can be used as a third mathematics course. Students can concurrently enroll in Financial Accounting (ACC 101) through FMCC at a reduced rate of tuition and earn four college credits, if they choose.

## MATH AND FINANCIAL APPLICATIONS

## 1 Unit and 3 possible college credits

Open to students entering grade 10 and above
Course offered alternating years and will be offered in the 2019-2020 school year
This full year course is a specialized interdisciplinary business course that applies mathematics to personal business situations. This course involves the application of mathematics to the study of statistics, checking accounts, payroll, discounts, interest rates, annuities, investments, credit (loans and mortgages), depreciation, inventory, financial statements, insurance, stocks and bonds. This course is designed to prepare students for college level business programs, to understand the complex financial world they will encounter during their lives and work extensively with spreadsheets. This course can fulfill part of the third year mathematics requirement. Students can concurrently enroll in Quantitative Business Applications (BUS 115) through FMCC at a reduced tuition rate and earn three college credits for this course, if they choose.

## PRINCIPLES OF BUSINESS

## 1 Unit and 3 possible college credits

Open to students entering grade 11 and above
This full year course introduces students to the exciting world 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. Additionally, this course is designed to introduce students to systems, techniques and best practices that will help students be successful in business courses and their careers. Students can concurrently enroll in Principles of Business (BUS 101) through FMCC at a reduced tuition rate and earn three college credits, if they choose.

## ENGLISH

The Common Core Standards for English Language Arts (ELA) are: Balancing Informational and Literary Text

- Building Knowledge in the Disciplines
- Staircase of Complexity
- Text-based Answers
- Writing from Sources
- Academic Vocabulary

All students must earn four units of English. Required courses are English 9, English 10, English 11, and a choice of senior year English. All students take the Regents Examination in English Language Arts in June of grade 11.

| English 9 | 1 Unit |
| :--- | ---: |
| English 9 Honors | 1 Unit |
| English 10 | 1 Unit |
| English 10 Honors | 1 Unit |
| English 11 | 1 Unit |
| English 11 Honors | 1 Unit |
| Senior English | 1 Unit |
| English $103 /$ English 104 | 2 Units |

## ENGLISH 9

1 Unit
Open to students who have passed English 8
This course is structured according to NYS Education Department guidelines for ninth grade English. Reading comprehension, vocabulary development and writing are emphasized throughout the year. NYS Common Core Standards are incorporated through the use of the ELA Grade 9 Modules, as well as supplemental texts. Quick writes, mid-unit, and end-of-unit writing assessments are implemented. Students also read and analyze short stories, novels, and plays, including the works of Ray Bradbury and Edgar Allen Poe. Novels include, but are not limited to Anthem, To Kill a Mockingbird, and Romeo and Juliet.

## ENGLISH 9 HONORS 1 Unit

Open to students entering grade 9 based on their performance in English the previous year and teacher's recommendation
In addition to supplemental texts and units, the ELA modules will be the basis for study in this course. This particular course is writing intensive, faster paced and covers more material than a standard English 9 class. The ability and commitment to reading independently is vital to success in this honors course. In addition to The Tell Tale Heart and Oedipus the King, other titles that will be covered include To Kill a Mockingbird, Anthem, Fahrenheit 451, and Romeo and Juliet. Students will be expected to continue to improve their critical thinking and analytical skills, as well as the ability to express ideas through classroom discussion and writing.

## ENGLISH 10 <br> 1 Unit

Open to students who have passed English 9
This course is structured using the Common Core Standards for tenth grade English. Students will focus on reading comprehension and literary analysis. These skills will continue to help them in their preparation for the Common Core ELA Regents in 11th grade. Writing tasks include text analysis responses, evidence based arguments, and a research paper. Vocabulary, spelling and grammar are taught within a literature text-based program.

## ENGLISH 10 HONORS

## 1 Unit

Open to student entering grade 10 based on their performance in English the previous year and teacher's recommendation
This course will use some of the texts from the regular English 10 curriculum but class will be structured to allow more student autonomy. More difficult texts will also be used in this course to challenge students to use higher level thinking skills. Students will be required to do more research, will participate in debates, and will write online discussion blogs throughout the school year.

## ENGLISH 11

1 Unit
Open to students who have passed English 10
This course will focus on reading American Literature and writing both analytical and research based papers. Several novels and short story units will be covered as well as poetry and portfolio based projects. English 11 will also prepare students for the New York State Regents Examination in English Language Arts. In preparation for this exam, students will be reading and writing in accordance with the New York State Standards and the rubric's assessment.

## ENGLISH 11 HONORS

1 Unit
Open to students entering grade 11 based on their performance in English the previous year and teacher's recommendation
This course covers all state mandated common core Regents preparation. This class will prepare students who are interested in taking College English who possess strong critical thinking skills and a strong academic work ethic. In addition to the traditional mandated texts and writing, students will be challenged with more in-depth texts and will be expected to read independently and discuss each at a college level of inquiry.

## SENIOR ENGLISH

## 1 Unit

Open to students who have passed English 11
In Senior English students will develop reading comprehension, vocabulary acquisition, research, and writing skills. Content will include both fiction and non-fiction texts. Attendance is a required component of this class and excessive absences will affect a student's grade for this course.

## ENGLISH 103/ENGLISH 104

2 Units and 6 possible college credits
Open to students who have passed the ELA Regents exam and earned a final grade of 88 in English 11 and/or have the teacher's recommendation

In ENG 103 students will learn different essay styles that can be used in any college course. The student will express ideas and thoughts in a grammatical, concise manner. In-depth study of sentence structure and voice will be stressed in each assignment. The student will learn MLA style of writing and researching for an oral and written project. The student will read published essays, short stories and other texts to familiarize themselves with the writing format and voice for each essay. In ENG 104 the communication skills learned in ENG 103 will be expanded upon. Students will work with the following genres: short story, drama, poetry and the novel. Students will analyze and interpret literature in essays, class discussion, and research based assignments. Students can concurrently enroll in English I (ENG 103) for the fall semester and English II (ENG 104) for the spring semester through FMCC at a reduced tuition rate and earn six college credits for this course.

## FOREIGN LANGUAGE

Students must earn at least one unit of credit in a language other than English (LOTE) in order to complete the foreign language requirement for a high school diploma. Students earn one unit of credit by passing the Second Language Proficiency Assessment at the end of grade 8, as well as the Level I course. Students wishing to earn a Regents Diploma with Advanced Designation must have 2 additional units of credit in a language other than English for a total of 3 units of credit and pass the Comprehensive Checkpoint B Exam at the end of Level III. College credit in foreign language is available for students in levels IV and V Spanish, as well as Elementary Italian I and II.

A student may also complete a five-unit sequence in career and technical education or business or the arts in place of the three credit foreign language requirement for the Regents Diploma with Advanced Designation. But most four year colleges require a minimum of two years of foreign language completed in high school for admission.

| Italian I | 1 Unit |
| :--- | ---: |
| Italian II | 1 Unit |
| Italian III | 1 Unit |
| Italian IV | 1 Unit |
| Spanish I | 1 Unit |
| Spanish II | 1 Unit |
| Spanish III | 1 Unit |
| Spanish IV | 1 Unit |
| Spanish V | 1 Unit |
| Elementary Italian I | 1 Unit |
| Elementary Italian II | 1 Unit |

## ITALIAN OR SPANISH LEVEL I

1 Unit
Open to students entering grade 8 and above
This course introduces students to basic speaking, listening, reading, writing and cultural language skills. Students are introduced to basic vocabulary, grammar and cultures of the areas where the language is spoken. A Proficiency Examination is given at the end of this course to fulfill the New York State 8th grade credit requirement. A passing score on the Proficiency is
required to go on to Level II and to receive 8th grade state credit. All New York State students must take and pass at least one level of a world language in order to graduate, unless exempted through an IEP.

## ITALIAN OR SPANISH LEVEL II

1 Unit
Open to students who have passed Level I and the Proficiency Exam
In this course students will learn more detailed vocabulary and develop a strong grammar base. Activities include learning how to communicate in an airport, discussing past, present and future activities, discussing the environment and technology, childhood and others. The class is well suited for students who wish to pursue an Advanced Regents Diploma. A local final exam is given at the end of this level.

## ITALIAN OR SPANISH LEVEL III

## 1 Unit

Open to students who have passed Level II
In this course students will extend conversation skills, give short presentations, read simple letters and advertisements, and write extended responses. Cultural study will continue. Topics may include fashion, household chores, travel and tourism, ecology, weather, emergency medical care, healthy living, childhood relationships and poetry. The Comprehensive Checkpoint B Examination is taken at the end of this course. Students must pass the course and the exam to be eligible for the Advanced Designation Regents Diploma.

## ITALIAN OR SPANISH LEVEL IV

## 1 Unit and 3 possible college credits

Open to students who have passed Level III and the Regents exam with a score of 75 or higher College credits through FMCC are only an option for Spanish IV students

This full year course is a continuation of the study of phonology, grammar, vocabulary and cultural information necessary for comprehending, speaking, reading, and writing intermediate level Spanish or Italian. Listening comprehension and speaking will be stressed. Cultures will be explored through selected readings and writing. For Spanish students only: Students can concurrently enroll in Intermediate Spanish I (SPA 201) through FMCC at a reduced tuition rate and earn three college credits. Sophomores need special permission of the instructor and the college to take this course for college credit.

## SPANISH LEVEL V

## 1 Unit and 3 possible college credits

Open to students who have passed Level IV
This full year college level course is the final class in the elementary-intermediate college sequence. This course is an extension of Intermediate Spanish I, pursuing the study of phonology, grammar, vocabulary, and cultural information necessary for comprehending, speaking, reading, and writing intermediate level Spanish. Listening comprehension and conversation skills will be stressed. Hispanic cultures will be explored through selected reading and writing. Students can concurrently enroll in Intermediate Spanish II (SPA 202) through FMCC at a reduced tuition rate and earn three college credits for this course.

## ELEMENTARY ITALIAN I

## 1 Unit and 3 possible college credits

Open to students entering grades 11 and above
It is assumed that the student has little or no Italian background. This twenty week course focuses on students communicating from day one. Students prepare grammatical material and bring questions to class. Class time is then spent on the use and practice of new material. Students are evaluated by a final, oral exams, writing assignments, and class participation. Quizzes may also be administered periodically during the semester. Classroom instruction is supplemented with activities in the language lab with online assignments via Google Classroom. Students are required to complete fifteen hours of lab work outside of class. The lab work includes online practice where students are exposed to Italian language through listening and speaking activities, via Edpuzzle. A workbook will be provided to improve listening and speaking skills as well as reading and writing. It also allows the teacher to track the amount of time spent in the lab and on each exercise that is assigned to them, while enabling the student to hear native speakers besides the teacher. It also has a myriad of games and activities students can use to review their knowledge of the language, learn about culture, review grammar skills and it is used to capture students' interest as it facilitates their learning. Students can concurrently enroll in Elementary Italian I (ITA 101) through FMCC at a reduced tuition rate and earn three college credits for this course.

## ELEMENTARY ITALIAN II

## 1 Unit and 3 possible college credits

Open to students who have completed Elementary Italian I
This twenty week course is designed for students who have completed Elementary Italian I, or two years of high school Italian. It continues the development of listening, speaking, reading, and writing skills covered in Elementary Italian I. The course continues to provide an understanding of the civilization, culture and customs of Italy. Classroom instruction is supplemented with activities in the language lab with online assignments. Students are required to complete fifteen hours of lab work outside of class. The lab work includes online practice where students are exposed to Italian language through listening and speaking activities, via Google Classroom and Edpuzzle. Online workbooks are used to improve listening and speaking skills as well as reading and writing. It also allows the teacher to track the amount of time spent in the lab and on each exercise that is assigned to them, while enabling the student to hear native speakers besides the teacher. It also has a myriad of games
and activities students can use to review their knowledge of the language, learn about culture, review grammar skills and it is used to capture students' interest as it facilitates their learning. Students can concurrently enroll in Elementary Italian II (ITA 102) through FMCC at a reduced tuition rate and earn three college credits for this course.

## HEALTH

## HEALTH

$1 / 2$ Unit
Open to students entering grade 10 and above
This course provides students with essential skills and information that focus on their ability to make positive choices. Physical, mental, and social aspects of health are covered through such topics as substance abuse prevention, psychology, human reproduction (including age appropriate sex education), consumer education, human effects on the environment, disease prevention and nutrition. Each health class promotes positive interpersonal skills through group interactions and activities. This course credit is required for high school graduation.

## MATHEMATICS

The Common Core Standards for mathematics are:

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning

Students must pass a minimum of three units of math to graduate. All students must pass the Algebra Regents exam to graduate. For an Advanced Regents Diploma students need to pass the Geometry and Algebra II Regents exams. Mayfield strongly encourages students to continue math throughout high school.

| Pre-Algebra | 1 Unit |
| :--- | ---: |
| Algebra I | 1 Unit |
| Geometry Year 1 | 1 Unit |
| Geometry | 1 Unit |
| Algebra II | 1 Unit |
| College Pre-calculus | 1 Unit |
| College Calculus | 1 Unit |
| Applied Math | 1 Unit |

## PRE-ALGEBRA

1 Unit
Open to students entering grade 9 who have passed Math 8
This course is a preparation for the Algebra I Regents course. The major topics from Math 8 will be reviewed along with the major topics of NYS Common Core Algebra curriculum. This Pre-Algebra course incorporates some of the above math standards within four categories: Number and Quantity, Algebra (seeing structure in expressions, working with polynomials and rational expressions, creating equations, reasoning with equations and inequalities), Functions (interpreting and building functions, understanding linear, quadratic and exponential models), and Statistics and Probability (interpreting quantitative and categorical data). A comprehensive final exam will be given at the end of the course.
teacher. Open to students entering grade 9 who have earned a final grade of 80 and above in Math 8 and a Level 2 or higher on the NYS Math 8 Assessment.

This Algebra course incorporates the above math standards within four categories: Number and Quantity, Algebra (seeing structure in expressions, working with polynomials and rational expressions, creating equations, reasoning with equations and inequalities), Functions (interpreting and building functions, understanding linear, quadratic and exponential models), and Statistics and Probability (interpreting quantitative and categorical data). This course culminates with the Algebra I Common Core Regents exam in June as the final exam for the course.

## GEOMETRY YEAR 1

## 1 Unit

Open to students who have passed the Algebra I course and Regents exam
This is a non-regents geometry course. Topics in this course will include geometric relationships, constructions, transformational geometry, informal proofs, and coordinate geometry. GeoGebra and other computer software programs will be used to demonstrate geometry topics. The topics will not be covered in the same depth as the one year Regents geometry course. A final exam will be given at the end of the course.

## GEOMETRY

## 1 Unit

Open to students who have passed the Algebra I course and Regents exam
The Geometry course incorporates the above math learning standards within the following categories: Congruence, Similarity, Right Triangles and Trigonometry, Circles, Expressing Geometric Properties with Equations (and using coordinates to prove simple geometric theorems), Geometric Measurement and Dimensions, and Modeling with Geometry. The course culminates with the Geometry Common Core Regents exam in June as the final exam for the class.

## ALGEBRA II

## 1 Unit and 4 possible college credits

Open to students who have passed Geometry and scored a 75 or above on the Algebra I Regents Exam.
The Algebra II course incorporates the above math learning standards within the following categories: Polynomial, Rational and Radical Relationships, Trigonometric Functions, Functions, and Inferences and Conclusions from Data. The course culminates with the Algebra II Common Core Regents exam in June as the final exam for the class. There is an option pending for students to get college credit for Intermediate Algebra (MAT 120) for this course through FMCC at a reduced rate of tuition. Students can take this class for or not for college credit.

## COLLEGE PRECALCULUS

## 1 Unit and 4 possible college credits

Open to students who have passed the Algebra II course and Regents exam
This course will prepare student with background material for the study of calculus. Topics include relations, functions, and graphs; inequalities and absolute value; exponential and logarithmic functions; circular functions and topics from trigonometry; complex numbers, synthetic division and solution of polynomial equations. Students can concurrently enroll in Pre-calculus (MAT 140) through FMCC at a reduced tuition rate and earn four college credits for this course.

## COLLEGE CALCULUS

## 1 Unit and 4 possible college credits

Open to students who have passed Pre-calculus
This is an introductory course in differential and integral calculus. Fundamental concepts of functions, limits, differentiation and integration of algebraic functions and trigonometric functions are explored. Students can concurrently enroll in Analytical Geometry and Calculus I (MAT 170) through FMCC at a reduced tuition rate and earn four college credits for this course.

## APPLIED MATH

1 Unit
Open to students entering grades 11 and above who have passed the Algebra I Regents exam
This is an integrated course utilizing materials that include hands-on laboratories and practical problem-solving activities. Topics include arithmetic, algebra, geometry, probability, estimation, and problem solving. This course builds on all those math skills already acquired and shows how these skills are encountered in daily life and utilized in specific career/job settings. A working understanding of Google classroom and Google products (such as docs, sheets, etc.) would be helpful.

## MUSIC AND THE PERFORMING ARTS

Art, Music and Performing Arts courses satisfy the art/music requirement for graduation. Five courses in ART or FINE ARTS may replace the three year Foreign Language requirement for the Regents Diploma with Advanced Designation. A five unit sequence in FINE ARTS is available by combining music courses with courses in art and performing arts.

| Senior High Band | $1 / 2$ Unit |
| :--- | :--- |
| Senior High Choir | $1 / 2$ Unit |
| History of Rock and Roll* | $1 / 2$ Unit |
| Music in the Movies** | $1 / 2$ Unit |
| Music Technology** | $1 / 2$ Unit |
| Music Theory* | $1 / 2$ Unit |
| Piano Lab I | $1 / 2$ Unit |
| Piano Lab II | $1 / 2$ Unit |

*course offered alternating years and will be offered in the 2019-2020 school year
**course offered alternating years and will not be offered until the 2020-2021 school year

## SENIOR HIGH BAND

½ Unit
Open to students entering grade 9 and above
Students learn and apply the skills of phrasing, control, technical flexibility, balance, intonation and reading music. This course provides actual performing experience as students rehearse and perform contemporary music for concert band. Students attend band on an alternate day basis and weekly small group instruction. Attendance at all concerts and parades is required. Students may take band more than once.

SENIOR HIGH CHOIR $\quad 1 / 2$ Unit
Open to students entering grade 9 and above
The goal of choir is for students to enhance their knowledge and understanding of music through the use of choral singing. Students will learn that choral singing is a specific art form within music in general. Students will learn warm-up exercises to improve their vocal ability, learn to sight sing, as well as, sing compositions written specifically for choirs in many different styles. Concert attendance and participation is required, as well as any extra scheduled concerts. This class meets on an alternate day basis for the entire year.

## HISTORY OF ROCK AND ROLL

$1 / 2$ Unit
Open to students entering grade 9 and above
Course offered alternating years and will be offered in the 2019-2020 school year
This course is designed to look in-depth at the history of contemporary music and its influences on society. Through guided listening and discussion students will be confronted with the role that music plays in our culture and with the ways it has affected the lives of others throughout history. Utilizing factual knowledge students will explore the history of music while learning basic music notation, analysis and performance skills. Each student will experience music directly by using these basic skills to perform and create music.

## MUSIC IN THE MOVIES

Open to students in grade 9 and above
Course offered alternating years and will not be offered until the 2020-2021 school year
This course will focus on the analysis of the musical structure and purpose of music in motion pictures. Students will watch a variety of films and discuss the purpose of the musical setting. This course will challenge students to think in depth on the emotional powers of music. Students will be discussing the musical orchestration, instrumentation, mood, timbre, and relevance to what is happening in the film.

## MUSIC TECHNOLOGY

1⁄2 Unit
Open to students entering grade 9 and above
Course offered alternating years and will not be offered until the 2020-2021 school year
This course will incorporate the use of the latest computer technology being used in the music industry. Students will use computers, both PC and Macintosh platforms, to explore, create, and develop their own music. Students will learn how to use computers to create musical compositions. Students will learn to transcribe existing music, compose original works and edit all different types of music. Students will learn how to professionally record music; this includes using soundboards, speakers,
microphones, and effects. Students will use and master these amazing new technologies: Garage Band, Finale, Audacity, Mach Five, and Digital Performer.

## MUSIC THEORY

## 1⁄2 Unit

Open to students entering grade 9 and above
Course offered alternating years and will be offered in the 2019-2020 school year
This course is for students who wish to build on their musical knowledge and learn to play piano and/or sing. Students will gain a better understanding of what music is and how it works within a musical style. Students will learn how to do basic musical functions such as read musical notes and rhythms, play piano, sight read, understand key signatures, chords, and build musical progressions. All students will receive a hands-on approach to understanding the background and functions of music.

## PIANO LAB I

$1 / 2$ Unit
Open to students entering grade 9 and above
This yearlong, every other day course is designed to teach beginners the basics of piano. Piano Lab provides opportunities for students to start learning how to play the piano. Students will receive training in piano technique, music reading and, basic music theory and apply their growing knowledge and skills to playing pieces and songs ranging from traditional to popular songs within their level of ability. Musical skills are taught on state of the art digital pianos and students learn at their own pace.

## PIANO LAB II

$1 / 2$ Unit
Open to student who have passed Piano Lab I or audition with course instructor
Piano lab II provides opportunities for students to continue learning how to play the piano. Students will receive training in piano technique, music reading, and basic music theory and apply their growing knowledge and skills to playing pieces and songs ranging from classical to popular within their level of performance. Musical skills are taught on state of the art digital pianos and students learn at their own pace. Piano Lab I is required or audition with the teacher prior to the start of class.

## PHYSICAL EDUCATION

All students must take and pass Physical Education each year of high school. The Physical Education curriculum is designed to encourage participation for all levels of ability.

## PHYSICAL EDUCATION

$1 / 2$ Unit
Physical education is a required course for all students. The curriculum consists of personal fitness and lifetime sport activities. Some activities include fitness testing, archery, orienteering, aerobic fitness, weight training, volleyball, racquetball, tennis, golf, cross-country skiing, new games, adventure and group challenge activities, basketball and softball. All students must dress appropriately (i.e. sneakers, gym shorts, T-shirt, or sweats), and participate to the best of their ability. Students are graded $2 / 3$ on participation and preparation; skills and written tests count 1/3.

## SCIENCE

All students need to take and pass three science courses for graduation, as well as one science Regents exam. One of the three science units needs to be from the physical setting and one needs to be from the living environment setting. All ninth graders take the Regents Living Environment course, unless they accelerated into the course as an eighth grader. All tenth graders take either Earth Science or Chemistry. Mayfield strongly encourages students to study science throughout high school. All Regents science courses require a science lab in addition to the class. In order to qualify to take a Regents examination in any of the sciences, a student must complete 1200 minutes of laboratory experience with satisfactorily documented laboratory reports.

| Regents Living Environment | 1 Unit |
| :--- | :--- |
| Regents Earth Science | 1 Unit |
| Regents Chemistry | 1 Unit |


| Regents Physics | 1 Unit |
| :--- | :--- |
| The Life and Times of Dinosaurs | 1 Unit |
| Applied Science | 1 Unit |
| Forensic Science | 1 Unit |
| Anatomy and Physiology | 1 Unit |
| Advanced Placement Biology* | 1 Unit |

*course offered alternating years and will be offered in the 2019-2010 school year

## REGENTS LIVING ENVIRONMENT

## 1 Unit

Open to students entering grade 8 who have earned a final grade of 95 in Science 7 with their grade 7 science teacher's recommendation
Open to any students entering grade 9
This inquiry-based Regents level course surveys various biological topics including, biochemistry, cytology, genetics, reproduction and development, anatomy and physiology, and ecology. Students complete various activities with a focus on relevant topics that students will be able to use in their daily lives. The Living Environment Regents exam is given in June.

## REGENTS EARTH SCIENCE <br> 1 Unit

Open to students entering grade 9 who have passed the Living Environment course and Regents exam Open to any students entering grade 10 and above

This course covers topics in geology, mineralogy, astronomy, meteorology, topography and oceanography. Students are evaluated on labs, tests and quizzes. The class style is hands-on, lab-based learning with an emphasis on problem solving and real world applications. The Earth Science Regents exam is given in June. Required materials include a simple calculator and colored pencils.

## REGENTS CHEMISTRY

1 Unit
Open to students who have passed the Algebra I Regents exam and one science Regents exam
This course includes the study of matter and energy, atomic structure, bonding, periodic table, mathematics of chemistry, kinetics and equilibrium, acid-base, oxidation-reduction, organic chemistry, and nuclear chemistry. The laboratory portion of this course involves hands-on experimentation with various chemical compounds, acids, bases, fire and combustible materials. The Chemistry Regents exam is given in June as the final exam. If Regents Chemistry is qualifying as a student's third science (necessary for graduation) and the student has a failing average at the end of the second quarter, in an effort to ensure that he/she earn credit and meet the graduation requirements, the student will be required to move to Applied (nonRegents) Chemistry.

## REGENTS PHYSICS

## 1 Unit and 3 possible college credits

Open to students who have passed the Algebra II course and one science Regents exam
The course consists of five units: mechanics, electricity and magnetism, energy, waves, and modern physics. The course also involves a number of creative projects including a mousetrap launcher, a Rube Goldberg device and a rubber band vehicle. One goal is to expand the student's ability to solve problems alone and in small groups. The Physics Regents exam is given in June. Students can concurrently enroll to get college credit for Intro to Physics I (SCl161) for this course through FMCC at a reduced rate of tuition. Students can take this class for or not for college credit.

## THE LIFE AND TIMES OF DINOSAURS

## 1 Unit

Open to students who have passed one science Regents exam, preferably Living Environment
This course focuses on the ecology of extinct ecosystems as scientists currently understand them. Major concepts addressed are: evolution and adaptation, interdependence of organisms, geologic changes and their influence on living things, and the scientific method. Although all geologic eras will be covered, the class focuses on the geologic era during which the dinosaurs lived. Students will be exposed to recent scientific discoveries about dinosaurs and other ancient life. They will learn about these organisms through lab activities, lectures, research projects, videos and readings.

## APPLIED SCIENCE

Open to students who have passed at least one science Regents exam.
This full year course focuses on all types of science topics including, but not limited to the areas of Biology, Chemistry, Earth Science, Physics and Environmental Science. Course work will include direct academic instruction as well as hands on, laboratory activities to explore the various the disciplines of science and bring them together to show the interrelationships they have with each other. Relating traditional knowledge to recent scientific discovery and real world events will also be an area of study.
FORENSIC SCIENCE 1 Unit

Open to students entering grades 11 and above who have passed two Regents level science classes
This course will introduce students to basic scientific principles and techniques used by law enforcement agencies when they investigate a crime scene. The Forensic Science course is designed around inquiry-based performance assessments with students working in teams to solve crimes using scientific knowledge and reasoning. The course encompasses all areas of science with an emphasis on complex reasoning and critical thinking. In addition to using science skills acquired in other high school science courses, students will incorporate the uses of technology, communication skills, and language arts. A major emphasis will be put on laboratory work and portfolios in this class.

## ANATOMY AND PHYSIOLOGY

1 Unit and 3 possible college credits
Open to students entering grade 10 and above who have passed the Living Environment and Chemistry courses and their respective Regents exams, or have instructor permission

Anatomy and Physiology is intended for students who wish to pursue careers in areas of health such as a doctor, nurse, veterinarian, dentist, biologist, radiologist or pharmacist. Students pursuing a career in one of these fields will be required to take a college-level anatomy and physiology course in their freshmen or sophomore year. Therefore, the purpose of the course is to introduce anatomy and physiology so they will be better prepared for the challenges of this rigorous coursework. It will focus on eleven systems of the body and include learning the names and functions of hundreds of structures. The course requires a great deal of memorization. Coursework includes a combination of lectures, reading, independent projects and laboratory experiences, Exams will include identification of structures by lab practical and written responses. Students can also concurrently enroll in Essentials of Anatomy and Physiology I (SCl136) through FMCC at a reduced tuition rate and earn three college credits for this course. Students can take this class for or not for college credit.

## ADVANCED PLACEMENT BIOLOGY

## 1 Unit and 4 possible college credits

Open to students entering grades 11 and above who have passed the Living Environment and Chemistry Regents exams Course offered alternating years and will be offered in the 2019-2020 school year

This college level course is a survey exploring the study of life using chemical, genetic, evolutionary, structural and functional approaches. This demanding course requires motivation, dedication and a desire to learn. Students may receive college credit or advanced standing for this course depending upon the grade earned on the AP test in May and the policy of the college the student attends. There is a fee for the test, but no student will be denied access to the test based upon ability to pay. Students can also concurrently enroll in General Biology II (BIO 171) through FMCC at a reduced tuition rate and earn four college credits for this course.

## SOCIAL STUDIES

All students must pass four units of social studies in order to earn a high school diploma. Required courses are Global History 9, Global History 10, United States History and Government, Participation in Government and Economics.

| Global History 9 | 1 Unit |
| :--- | ---: |
| Global History 10 | 1 Unit |
| United States History and Government | 1 Unit |
| Advanced Placement United States History | 1 Unit |
| Economics | $1 / 2$ Unit |
| Participation in Government | $1 / 2$ Unit |
| College Government | 1 Unit |
| History of the Holocaust | $1 / 2$ Unit |
| SUPA Psychology | 1 Unit |

## GLOBAL HISTORY 9

1 Unit
Open to students entering grade 9 and above
This course examines the history of the world from pre-history through the end of the eighteenth century. Special emphasis is placed on the geography of the world, religions of the world, the development of political and economic systems throughout time and place, and the development of world cultures. This course is designed to improve each student's reading, writing and analytical skills through assignments including the writing of thematic essays and document based questions.

## GLOBAL HISTORY 10

1 Unit
Open to students who have passed Global History 9
This course is a continuation of Global History 9. It examines the major forces in history from the Enlightenment to the present day. It analyzes the role of the individual within his culture and historical era. It looks at the role of nationalism, imperialism, and industrialization as they interact in events from the past to the present. Projects, papers, and evaluation documents are some of the skills emphasized in this course. The course prepares the student to take the Global History Regents examination in June, which covers material from both grades 9 and 10.

## UNITED STATES HISTORY AND GOVERNMENT

## 1 Unit

Open to students who have passed Global History 10
This course is designed to improve each student's reading, writing and reasoning skills. U.S. History is presented in a thematic approach. Students study the structure and function of government so that they may develop a stronger commitment to democratic values. One goal is to explain the relevance of the past to modern day young citizens. Contemporary issues are an integral part of the course. Oral and written reports are assigned throughout the year. The Regents exam in U.S. History and Government is taken at the end of the course.

## ADVANCED PLACEMENT UNITED STATES HISTORY

## 1 Unit and 6 possible college credits

Open to students entering grade 11 and above who have scored an 85 or higher on the Global History Regents exam and course

This Advanced Placement course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in US History. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full year introductory college courses. Students should learn to assess historical material, their relevance to a given interpretive problem, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical scholarships. In addition to exposing students to a very detailed list of historical content, students will analyze and interpret primary sources, including commentary material, maps, statistical tables, and pictorial and graphic evidence of historical events. Students will learn to take notes from both printed materials and lectures or discussions, write essay examinations and write analytical and research papers. The Advanced Placement exam is given in May for a fee. No student will be denied access to this test based upon ability to pay. The Regents exam in US History and Government is also given in June. Although this is an AP course, students can also choose to concurrently enroll in Survey of American History I (HIS 105) for the fall semester and Survey of American History II (HIS 106) for the spring semester through Fulton Montgomery Community College at a reduced tuition rate and earn six college credits for this course.

## ECONOMICS <br> ½ Unit

Open to students entering grade 12 who have passed the US History and Government course
This course is designed to provide students with economic knowledge and skills that enable them to function as informed and economically literate citizens in our society and the world. Topics range from personal economic decision-making to an understanding of the interdependence of the world's economy today.

## PARTICIPATION IN GOVERNMENT <br> ½ Unit

Open to students entering grade 12 who have passed the US History and Government course
The purpose of this course is to relate the content and skills of earlier social studies courses to the individual student's need to act as a responsible citizen. Participation is interpreted to include all groups of which students are "citizens". Students participate in the analysis of public issues. Research is required in and out of school and a senior project is required to pass the course.

## COLLEGE GOVERNMENT

Open to students entering grade 12
This course is an alternate college level option for the Participation in Government high school graduation requirement. The purpose of this half year spring semester course is to examine the various political and governmental structures that make up the American political system: political culture, constitutional arrangements, public opinion, pressure groups, political parties, elections, Congress, president, courts, and bureaucracy. The major theme of this study is the understanding that since the American political system was intentionally designed to make it difficult for any one individual or group to govern effectively, public policies are usually the results of compromises; hence, the final outcome is less than any one wishes. Hoping to make the student a realistic observer of the process, the course explores how the "system" affects the relationship between the promises and the performances of elected officials. Students can concurrently enroll in American Political Systems (POL 101) through FMCC at a reduced tuition rate and earn three college credits for this course.

Open to students entering grade 11 or above
This half year course is an exploration into the causes and consequences of the Nazi Holocaust. This course will begin by taking an in-depth look into the roots of anti-Semitism dating to the earliest days of Judaism. The class then examines European Jewish life during the first half of the century, considers the development of Nazism, and discusses Nazi efforts to eliminate those marked as "a-socials" in German society. As a discussion based course, we will pay close attention to the variety of ways that Jews and other targeted groups responded to this crisis. Finally, it examines a number of survivor accounts and the impact that survivors have on the world today. Students will be expected to participate in daily discussions, readings, individual research, and presentations to obtain a deeper understanding of how hate can led to genocide and the impact the Holocaust has on the world today.

## SUPA PSYCHOLOGY

## 1 Unit and 3 possible college credits

Open to students entering grade 12
This is a full year introductory psychology course with the primary goal of providing students with the fundamental concepts of psychology that make us human-perception, sensation, emotion, personality, learning, memory, stress, and social behavior. This class will apply emerging psychological theories to real-life experiences and provide insight into why humans behave the way they do. Students will become acquainted with psychological research methods, read college level texts and develop their oral and written communication of psychological knowledge. Students can choose to enroll in Foundations of Human Behavior (PSY 205) through Syracuse University Project Advance (SUPA) for a reduced tuition rate and earn three college credits.

## TECHNOLOGY

Our high school technology courses build on the curriculum taught in seventh and eighth grade and provide state of the art, industry standard robotics and software platforms. The department will be adding even more to the already amazing robotics curriculum, and using cutting edge mechanical engineering, civil engineering, and architectural software, that is used by all of the top engineering universities and corporations. The demand is greater than ever for engineers and graduates within the STEM (science, technology, engineering, and mathematics) fields.

| Introduction to Engineering Design*** | 1 Unit |
| :--- | ---: |
| Residential Structures | 1 Unit |
| Principles of Engineering | 1 Unit |
| Spreadsheets and Databases\# | 1 Unit |
| Programming Logic and Design\# | 1 Unit |

***course can be used to fulfill the art/music requirement for graduation \#both courses (together) can be used to fulfill the third year math credit for a Regents diploma only

## INTRODUCTION TO ENGINEERING DESIGN

## 1 Unit and 3 possible college credits

Open to students entering grade 9 and above
In this course students will use what they have learned in design and modeling (7th grade) by combining more advanced technical drawing, and industry standard 3-D modeling software (a sophisticated mathematical technique for representing solid objects) with solving design problems. The students will be presented a series of design/engineering problems that will be solved with the use of drawings, where they will keep an engineering notebook to document their ideas and sketches using the design process, resulting in the production of an incredible, working prototype of their design with a state-of-the-art 3-D printer. Students will work on projects, activities, and problems not only of interest to them, but that have global and human impacts. Students will work in teams to design and improve products, document their solutions, and communicate them to others. Students can receive three college credits at a reduced rate of tuition through Rochester Institute of Technology (RIT) upon successful completion of the course with a final grade of 85 and a 6 out of 9 on the final exam.

## RESIDENTIAL STRUCTURES

## 1 Unit

Open to students entering grade 10 and above
Residential Structures is a study of the many systems and skills involved in constructing residential buildings. Course content includes: resources (e.g. planning, materials, supplies, and finances), processes (e.g. framing, roofing, plumbing, insulation, electrical), and outputs and effects (e.g. quality assurance, environmental impact economic consequences). Students will be required, by the end of the course, to complete homework assignments, complete the framing of a scale model including
floor, walls, ceiling and roof, and complete many modules on basic home repair and maintenance (e.g. electrical wiring, plumbing, insulation, finishing walls, running molding, and laying out a set of stairs).

## PRINCIPLES OF ENGINEERING (POE)

1 Unit and 3 possible college credits
Open to student entering grade 10 and above who are enrolled in advanced math courses
This is a high school-level survey course of engineering. The course exposes students to some of the major concepts that they will encounter in a college engineering course of study. Students have an opportunity to investigate engineering and high tech careers and to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Students will use industry standard 3D modeling software (a sophisticated mathematical technique for representing solid objects) and use a robust robotics platform, RobotC, to design, build and program a solution to solve an existing problem. To be successful in this course, students should be concurrently enrolled in college preparatory mathematics and science. Students will employ engineering and scientific concepts in the solution of engineering design problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community. Students can receive three college credits at a reduced rate of tuition through Rochester Institute of Technology (RIT) upon successful completion of the course with a final grade of 85 and a 6 out of 9 on the final exam.

## SPREADSHEETS AND DATABASES

## 1 Unit and 3 possible college credits

Open to students entering grade 10 and above who have passed the Algebra I Regents exam with a minimum score of 75 , or permission of the instructor

This twenty week class is designed for students who have prior hands-on experience with computers and software such as Windows, word processing applications, and presentation/slideshow applications. This course explores the power of spreadsheet and database productivity software. Specific course topics may include basic spreadsheet concepts, formulas, advanced functions, data analysis, large workbooks, macros, VBA, Pivot Tables, and Pivot Chart reports, as well as basic database concepts, tables, forms, queries and reports. Students can receive three college credits in CIS 110 from FMCC at a reduced tuition rate. Students can take this class for or not for college credit.

## PROGRAMMING LOGIC AND DESIGN

## 1 Unit and 3 possible college credits

Open to student entering grade 10 and above who have passed the Algebra I Regents exam with a minimum score of 75 , or permission of instructor

This twenty week class uses a language-independent approach to teach the basic concepts of problem-solving and programming logic. This course will cover the fundamental concepts and terminology used by programmers. By using pseudocode, flowcharts, and other tools, students will learn how to develop the logic of a program without focusing on program language syntax. Students will acquire skills that allow them to create rudimentary computer programs. Fundamental topics, including variables, constants, data types, operators, arguments, control structures and arrays, will be covered. Other topics include GUI (Graphical User Interface) applications and event-driven programming. This course assumes no previous programming knowledge or experience. Students can receive three college credits in CIS 115 through FMCC at a reduced tuition rate. Students can take this class for or not for college credit.

## DISTANCE LEARNING OFFERINGS

Mayfield High School has the ability to receive classes from other schools within the Distance Learning Consortium that includes school districts from the Capital Region, Saratoga, Warren, Washington, Essex, Hamilton, Franklin and Montgomery counties. These classes meet in Mayfield High School's distance learning classroom that is equipped with dual video HD displays that allow each connected classroom to view the instructor, content, and all participating students. Ceiling microphones are installed to insure sound coverage from the podium and student areas. Program audio is amplified and delivered to the room via an array of ceiling speakers. The teacher's podium is equipped with digital document cameras, laptop and PC connections that allow the instructor to display and share content from multiple sources. Fully integrated touch panels control all room functions and peripheral equipment including multiple cameras. Courses offered are matched as closely as possible with the Mayfield bell schedule.

The following classes may be offered for the 2019-2020 school year based on enrollment interest and availability.

| Adolescent Psychology | $1 / 2$ Unit |
| :--- | :--- |
| Astronomy | $1 / 2$ Unit |
| Creative Writing | $1 / 2$ Unit |
| History of American Sports | 1 Unit |
| Human Development | $1 / 2$ Unit |
| Modern Cosmology | $1 / 2$ Unit |

## ADOLESCENT PSYCHOLOGY

½ Unit
Open to students entering grade 9 and above.
Today's adolescent lives in an increasingly complex world. The expectations for, and responsibilities of adolescents is in a state of constant change. This course will explore the physiological, cognitive, and psychosocial transitions of adolescence along with the impact of family and social influences on the essential tasks of this developmental stage. Students will also explore the personal characteristics necessary for successful careers in the adolescent psychology field. Students will apply the skills of communication, leadership, management, and thinking into each of the content topics which include: Cultural and Historical Perspectives of Adolescence, Theories of Psychology, Identity Formation, Relationships, Communication Skills, Social Reasoning, Independence and Autonomy, Mental Health, Media Literacy, and Public Policy. Attendance at one field trip may be required for the course. This is a spring semester class offered by Warrensburg Junior Senior High School through the Distance Learning Network pending enrollment and availability.

## ASTRONOMY

1 ² Unit
Open to students in grades 11 and 12
In this course you will study the Earth's solar system and night sky using computer software. You will learn how to simulate the night from anywhere in the world over a span of tens of thousands of years. You will also study the sun, moon, and neighboring planets. You will look at some of the phenomena occurring in our solar system such as transits, eclipses, conjunctions, etc. This is a fall semester class offered by Wells School District through the Distance Learning Network pending enrollment and availability.

## CREATIVE WRITING

½ Unit
Open to students who have successfully completed English 9 and English 10

This half year creative writing class will involve writing poetry, sonnets, ballads, and odes, as well as creative nonfiction, flash fiction, one-act drama and independent choice. Emphasis is placed on peer-work-shopping and shared reading. Writers design, layout, edit, publish and distribute the literary magazine using Microsoft software. This is a spring semester class offered by Wells Central School through the Distance Learning Network pending enrollment and availability.

## HISTORY OF AMERICAN SPORTS

1 Unit
Open to students in grades 9 and above
This social studies elective class will examine the development of sport(s) in America as well as throughout world history. Our historical study will focus on helping students gain a better understanding of the inner relationship that sport has on social, economic, cultural and political forces that are at work in the United States as well as the world. We will examine the historical context as well as the significance of gender, race, ethnicity and social class. We will do our historical investigation through readings, primary sources, audio and visual materials as well as class discussions and guests. We will unlock the mystery "hold" that sport has on the American public through our analysis and discussion. Students will gain historical knowledge about the historical origins and development of various sports in America as well as worldwide, major political, social, cultural, economic, and intellectual concepts throughout chronological history of sport. Students will understand why and how sports have become a popular cultural phenomenon. Students will also learn a greater appreciation for the issues that have affected sports such as gender, discrimination, race bias, and class economics. Students will also begin to recognize the influence that commercialization has within the sports world. This full year class is offered through Cambridge Central School District through the Distance Learning Network pending enrollment and availability.

## HUMAN DEVELOPMENT

1⁄2 Unit
Open to students entering grade 9 and above
Human Development/Lifespan Studies focuses on skills needed to understanding changing relationships across the life cycle. This course covers growth and development of the brain, prenatal, childhood and adolescent development, as well as adult and elder year issues. Students learn strategies for understanding themselves and dealing with change to help them manage the challenges of living in today's world. Attendance at one field trip may be a requirement of this course. This is a fall semester class offered by Warrensburg Junior Senior High School through the Distance Learning Network pending enrollment and availability.

## MODERN COSMOLOGY

1⁄2 Unit
Open to students in grades 11 and 12
In this course you will go beyond the solar system and learn about what lies in our galaxy and our universe! You will study the
theories and data gathering that scientists have come up with to describe the organization of our universe and its origin. You will also look at how scientists discover exo-planets and study the possibility of life on other planets. You will discuss why scientists believe in black holes, dark matter, and dark energy. This is a spring semester class offered by Wells Central School through the Distance Learning Network pending enrollment and availability.

## THE SHORT STORY <br> 1⁄2 Unit

Open to 11th graders who have earned a minimum final average of 85 in English 10, and 12th graders who have earned a minimum final average of 85 in English 11

This half-year spring course is a critical exploration of the short story in its many forms. The course will survey works from classic masters (such as Chekhov, Lawrence, Poe, and Hawthorne) and more modern technicians (Hemingway, Cheever, Dubus, Carver, Lahiri). Students will also learn various models of critical studies through which to analyze the stories including psychological analysis, gender studies, new critical studies, and liberal humanism. Class discussions will be the center of the course, with each student taking a turn in role of "expert" and "discussion leader. This class offered by Schuylerville Central School through the Distance Learning Network pending enrollment and availability.

## VETERINARY SCEINCE

## 1 Unit

Open to students who have the passed Living Environment course and the Regents exam
This course is designed to provide students with the insight needed to make a decision to further their education in veterinary medicine. The course will focus on various aspects of veterinary medicine including: comparative anatomy, safe handling and restraint, clinical exams and diagnoses, hospital procedures, lab techniques, surgery, veterinary tools and terminology, disease prevention and treatment, and parasitology. This full year class is offered by Fonda-Fultonville School District through the Distance Learning Network pending enrollment and availability.

## CAREER AND TECHNICAL TRAINING

The mission of the Career and Technical Center is to provide technical training opportunities for a competitive world. The Career and Technical Center offers many two-year programs and one senior year program that enable students to be prepared for the job market or college after graduation from high school. Students attend the Career and Technical Center for a half-day during both grades 11 and 12, and may earn a total of 7 units if enrolled in a two-year program. Students who complete a two-year Career Ed program earn five units in OCCUPATIONAL EDUCATION, which can replace the three year foreign language requirement for a Regents Diploma with Advanced Designation. Students interested in learning more about the Career and Technical Center should speak with their guidance counselor early on in high school. Eligibility for participation in a two year program at the Career Education Center requires successful completion of English 9 and 10, Global History 9 and 10, two units of Math and two units of Science and one unit of Art and/or Music.
Auto Body Repair I
Auto Body Repair II
Auto Technology I
Auto Technology II
Careers in Education I
Careers in Education II
Cybersecurity \& IT Essentials
Cybersecurity Essentials
$\quad$ \& CISCO Networking Academy
Construction Technology I
Construction Technology II
Cosmetology I
Cosmetology II
Criminal Justice I
Criminal Justice II (Corrections)
Culinary Arts I
Culinary Arts II
Digital Multimedia I
Digital Multimedia II
Engineering Technology I
Engineering Technology II
Environmental Conservation I
Environmental Conservation II

Auto Body Repair I
$31 / 2$ Units
$31 / 2$ Units
$31 / 2$ Units
2 $1 / 2$ Units plus 1 additional integrated unit of English 12
$31 / 2$ Units
$21 / 2$ Units plus 1 additional integrated unit of English 12
$3 ½$ Units
$21 / 2$ Units plus 1 additional integrated unit of Applied Math
$31 / 2$ Units
$21 / 2$ Units plus 1 additional integrated unit of Applied Math
$31 / 2$ Units
3112 Units
2 Units plus $1 / 2$ additional integrated unit of Participation in Gov't.
2 Units plus $1 / 2$ additional integrated unit of Economics
$31 / 2$ Units
2½ Units plus 1 additional integrated unit of English 12
$31 / 2$ Units
3112 Units
$11 / 2$ Units plus 1 science unit and 1 math unit
$21 / 2$ Units plus 1 additional science unit
3½ Units
2½ Units plus 1 additional integrated unit of Applied Math

| Foundations of Food Service I | $311 / 2$ Units |
| :--- | :--- |
| Foundations of Food Service II | $31 / 2$ Units |
| Medical Assisting I | $31 / 2$ Units |
| Medical Assisting II | $21 / 2$ Units plus 1 additional unit of Anatomy and Physiology |
| New Visions Health Careers | 2 Units plus 1 unit of College English, $1 / 2$ unit of Economics and |
|  | $1 / 2$ unit of Participation in Govt. (For seniors only) |
| Skilled Trades Program | $31 / 2$ Units (For seniors only) |
| Veterinary and Animal Science I | $31 / 2$ Units |
| Veterinary and Animal Science II | $2^{1 ⁄ 2}$ Units plus 1 unit of Animal Anatomy and Physiology |

## AUTO BODY REPAIR

Students learn to repair and refinish damaged vehicles with I-Car Advance Tech training; Chief E-Z Liner Frame Equipment and HVIP refinish equipment. They also learn high-tech welding methods, flexible and rigid plastic repair, as well as how to calculate repair costs and establish estimates. This program offers selected graduates articulated college credit through Lincoln Technical Institute, Ohio Technical College or Morrisville State College.

## AUTO TECHNOLOGY

Through the A.S.E. certified and nationally recognized program, students learn theory and gain practical hands-on experience with engines, carburetion, fuel injection, electrical systems and components, brakes, clutches, transmissions, steering, suspension, (front and rear), rear axle assemblies, air conditioning, routine service procedures and diagnosis, and computer control systems. The program offers high-tech diagnostic equipment, modern demonstration vehicles, work-study programs, preparation for New York State inspection licensing, internships, auto manufacturer training, regional automotive competitions, live demonstrations from associated industries and support from an active Automotive Advisory Committee. Students who complete the program have the opportunity to receive a Technical Endorsement on their high school diploma. This program offers selected graduates articulated college credit through Morrisville State College, Ohio Technical College, or the University of Northwestern Ohio.

## CAREERS IN EDUCATION

This two-year program is intended to provide high school juniors with a beneficial transition from high school to collegelevel programs leading to licensing/certification in the field of education. These certification areas include: teacher assistant, teacher, guidance counselor, occupational, speech, or physical therapist, school psychologist, social worker or school administrator. The first year will be an exploratory opportunity for students to observe all NYS licensed positions in education from teaching assistant through administration. Coursework in methods and foundations will be taught, along with an emphasis in reading, writing and public speaking. During the second year the students select an area of education they would like to pursue a job shadowing/mentorship within. Guest speakers and field trips are conducted. Students have an opportunity to earn up to 12 college credits in Foundations of Education (EDU175), General Psychology (PSY 101), Child Development (PSY 210), and Adolescent Psychology (PSY 220) through FMCC. Students can earn this credit either through an articulation agreement directly with FMCC or by paying tuition at a reduced rate through FMCC's College in the High School Program which they can transfer to another college.

## CYBERSECURITY AND COMPUTER TECHNOLOGY

During the two-year Cybersecurity \& Computer Technology program, students learn the principles of Cybersecurity through completion of two courses: Introduction to Cybersecurity 2.1 and IT Essentials. Students complete these courses simultaneously with the IT Essentials and CISCO courses. This program teaches junior year students Introduction to Cybersecurity 2.1, which explores the field of cybersecurity, specifically the importance of cybersecurity, data confidentiality, best practices for internet and social media safety, and potential career opportunities in this growing field. Junior year also focuses on an IT Essentials course, which introduces students to the fundamentals of computer hardware and software, mobile devices, security and networking concepts, and the responsibilities of an IT professional. Senior year students take Cybersecurity Essentials, a course that covers foundational knowledge in all aspects of security in the cyber-world, including information security, systems security, network security, mobile security, physical security, ethics, and law. It builds students' skills in related technologies, procedures, defense, and mitigation techniques used in protecting businesses. The second half of senior year focuses on the CISCO Certified Entry Networking Technician (CCENT) certification training and test, which validates that a candidate has the skills required for an entry-level network support position, which is the starting point for many successful careers in networking. This program offers selected graduates articulated college credit through FMCC, Mohawk Valley CC, Bryant and Stratton College or SUNY Cobleskill.

## CONSTRUCTION TECHNOLOGY

This two-year program stresses career preparation in the building trades with integration of renewable resources. Students are exposed to a variety of construction trades including: residential construction, blueprint reading, building materials and tools, surveying, foundations, wall and roof systems, insulation, window and door installation, electricity and home energy analysis. Particular attention is paid to modern framing techniques and other "green" building strategies. Students may receive NCCER accreditation and high achieving students may receive a technical endorsement on their high school diploma. The
construction technology program includes integrated mathematics, providing students an opportunity to earn a mathematics credit toward graduation. This program offers selected graduates articulated college credit through FMCC, Alfred State and SUNY Delhi.

## COSMETOLOGY

Students are taught all phases of cosmetology and related fields, and receive training in hair cutting, hair styling, chemical services, nails and skin care. The 1,000 hour cosmetology program (including the 250 hour nail technology program) provides the skills and training required for students to apply for the state licensing exam. This program offers selected graduates articulated college credit through FMCC, Bryant and Stratton College, Schenectady County Community College, Utica School of Commerce, SUNY Cobleskill or The Art Institutes.

## CRIMINAL JUSTICE

An introduction to the criminal justice field is covered the first year including criminal and civil law, fingerprinting, investigation procedures, patrol functions, mechanical restraints, emergency response. The second year covers topics in corrections, probation, parole and security including security officer training. Prospective students must have excellent school attendance, grades and behavior, a recommendation by their guidance counselor and no prior police record. Students who complete both years earn one credit for Social Studies 12. This program offers selected graduates articulated college credit through FMCC, Bryant and Stratton College, Herkimer County Community College or Mohawk Valley Community College.

## CULINARY ARTS

Culinary Arts is a two-year program that prepares students for careers in the hospitality industry and provides a solid foundation for students interested in continuing related college studies. Students in this course will have the opportunity to study various units such as: baking and pastry, commercial food preparation, front end service, fine dining, restaurant operations, and catering. The program is aligned with the National Restaurant Association's Pro Start curriculum. In addition, students gain hands on experience in a state of the art kitchen and engage in work-based learning and leadership by catering special events, luncheons, dinners and completing an internship experience at a local restaurant, bakery, hotel or food service facility at the end of their senior year. Selected graduates can earn articulated college credit through Schenectady County Community College, SUNY Cobleskill, SUNY Delhi, New England Culinary Institute or Bryant and Stratton College.

## DIGITAL MULTIMEDIA AND COMMUNICATION

The program is a collaborative initiative designed to develop the knowledge, skills and attitudes students need to create and respond to evolving digital media techniques. Students use state-of-the-art Apple computers and digital equipment to create multimedia projects. In this course students will use the Adobe Master Suite Collection in photography and videography to create and manipulate digital media designs. This includes Photoshop (photography), Illustrator (illustration), In Design (page design), Dreamweaver (web design), Flash (multimedia), ProTools (audio), Premier (video) and After Effects (video). Students in this program will also utilize audio mixing and recording equipment in the digitally equipped sound studio. In addition, students learn professional and communication skills necessary to establish, maintain and develop client relationships. Selected graduates can earn articulated college credit through FMCC, Mohawk Valley Community College, SUNY Cobleskill, SUNY Canton or Bryant and Stratton College.

## ENGINEERING TECHNOLOGY with 2+1 COLLEGE OPTION

This program is a collaborative partnership with HFM BOCES, Fulton-Montgomery Community College and the National Science Foundation to create career opportunities for students in the field of 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. In this " $2+1$ " program, students will complete their two-year HFM BOCES Career and Tech program while accumulating 25 college credits (Electric Circuit Analysis I and II (ELT 125 and 126), Digital Electronics (ELT 132), Industrial Automation and Robotics I (ELT 131), Electronics I (ELT 229), Intermediate Algebra (MAT 120), and Computer Aided Drafting (CAD 174)) and then be prepared to complete their Associates degree in Electrical Technology at FMCC in one additional year. The credits accumulated at HFM would be at no cost to the students when they continue to FMCC (articulated credits). Students who choose to enroll at a different college may still earn college credits, but would be individually responsible for the tuition cost of those credits. Students enrolled in this program will utilize FMCC's Center for Engineering and Technology laboratories, including the chip fabrication clean room, robotics lab, and electronics facility. Students completing the engineering technology program will be prepared for engineering technician careers at a variety of regional advanced manufacturing industries or can continue their education at the Bachelor's degree level in an engineering technology field.

## ENVIRONMENTAL CONSERVATION

This two-year program stresses career preparation in forestry and lumber production, heavy equipment operation with emphasis on renewable resources. The core curriculum familiarizes them with the tools of the trade. Students learn to operate our fleet of bulldozers, backhoes and other heavy equipment as well as learn to operate power saws, welders, and other shop tools. Students can focus in one of four areas: (1) Forestry and Lumber Production where students operate chain saws to fell trees, buck up lumber and limb trees. They learn and operate the band saw mill and edger to produce graded lumber that is used primarily on campus. They will spend time in the woods studying Silva culture, wildlife and fauna. Highly qualified completers may take the NY State Game of Logging exam and may receive a technical endorsement on their high school diploma. (2) Heavy Equipment Operation where students learn to operate a variety of heavy equipment, learn "green" site management techniques, and may complete the first two classroom years of the four-year apprenticeship program required to become a journeyman operator. Students may receive NCCER accreditation and high achieving students may receive a technical endorsement on their high school diploma. (3) Renewable Resources where students participate in a variety of classroom and lab studies focused on renewable resources including, but not limited to, aquaculture, hydroponics, aquaponics, PV and wind power generation, and biodiesel production. HFM BOCES has extensive lab facilities for these studies in the building, on our nature trail, and around pond areas. The Environmental Conservation program includes integrated mathematics, providing students an opportunity to earn a mathematics credit toward graduation. This program offers selected graduates articulated college credit through Paul Smith's College or SUNY Cobleskill.

## FOUNDATIONS OF FOOD SERVICE

Students receive classroom instruction and hands-on training to prepare them for entry level employment in fast food, institutional or supermarket settings. The curriculum includes safety practices for all equipment used in a kitchen environment. Good work habits, personal hygiene, professional sanitation techniques, basic knife skills and common food service practices are taught. Students explore interpersonal skills, career opportunities and other world-of-work habits essential for success on the job. Second-year students learn more advanced baking and food preparation techniques, and also have work-study opportunities.

## MEDICAL ASSISTING

Students in this program are introduced to a full range of activities and tasks that medical assistants may undertake. Students acquire specialized knowledge skills and attitudes that allow them to perform administrative and clinical procedures in a variety of health settings. The New York State curriculum is followed. The course prepares students for entry level employment as a medical assistant. Students can earn high school science credit for Anatomy and Physiology through this program. This program offers selected graduates articulated college credit through FMCC.

## NEW VISIONS HEALTH CAREERS

In this senior year only program, students receive an "inside look" at the diversity of health careers through a year-long half day immersion program at Nathan Littauer Hospital. They learn the value of being good problem-solvers, decision-makers and team-players. This program is for students who want to go to college in the health field and is open to seniors who have completed 3 years of math and three lab sciences. There is an application process that involves an essay as well as teacher and guidance counselor recommendations. Participants receive one credit for grade 12 social studies and one for English 103 through FMCC, as well as two health credits.

## SKILLED TRADES PROGRAM

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 as projections show a national job growth in these trades to be approximately $25 \%$. This one year program is for seniors only who are interested in careers in the electrical; HVAC-heating, ventilation, and air conditioning; and plumbing fields. Students will explore career opportunities in the electrical, HVAC, and plumbing fields, gain hands on experience in the classroom, and learn other responsibilities in order to enter the workforce after high school or continue with technical training. Students will earn the NCCER Core and Electrical Apprentice I credential which is equivalent to the completion of a one year apprenticeship program.

## VETERINARY AND ANIMAL SCIENCE

This is a two year program intended to prepare students for a future in the expanding pet industry that offers a variety of career opportunities. This science-based program teaches skills in areas such as animal handling, animal anatomy and physiology, grooming including trimming of large animal hooves, pet first aid, health and disease, clinical practices, animal restraint training, reproduction, large animal nutrition, veterinary terminology and safety and sanitation. Students have experience working hands on with both small and large animals during their time in the program and will also take field trips to local dairy, beef, and sheep farms. Internships with local veterinary clinics, animal shelters, groom and training facilities are also part of the experience. Students can earn high school science credit for Comparative Animal Anatomy and Physiology through this program.

# PTECH, AG PTECH, AND FOOTHILLS PTECH (PATHWAYS TO TECHNOLOGY EARLY COLLEGE HIGH SCHOOL PROGRAM) 

PTECH is a program sponsored by the Hamilton, Fulton and Montgomery County BOCES and offered to all area high school students in a competitive application process in the winter of a student's eighth grade year. The program starts with the student's freshman year and continues until they have graduated from high school and college. Its unique characteristics are:

- Project Based Learning
- Business Partner Mentor
- Combined college and high school credits so that students finish the program with both a high school diploma and a two year associates degree, at no cost to themselves
- Individualized Career Pathways


## PTECH ACADEMY IN JOHNSTOWN

Students attend classes at the PTECH Academy in Johnstown and Fulton Montgomery Community College campus for the whole day. The career pathways available at PTECH Academy in Johnstown include the following Associate Degree Programs: Accounting, Business Administration, Business Technology and Applications, Electrical Technology, Computer Information Systems, Computer Networking, Computer Technology, Construction Technology, Medical Administrative Studies, Health Studies and Radiologic Technology. Participating students are transported by the Mayfield School District and still considered students at Mayfield, and are eligible to participate in all Mayfield extra-curricular activities and sports teams.

## AG PTECH ACADEMY IN ST. JOHNSVILLE

Students attend classes at the PTECH Academy in St. Johnsville and the State University of New York at Cobleskill campus. The career pathways available at AG PTECH include the following Associate Degree Programs: Agricultural Business, Agricultural Engineer Technology and Power Machinery, Agricultural Science, Animal Industry, Biological Technology, Culinary Arts, Environmental Studies, Fisheries and Wildlife Technology, and Sustainable Crop Production. Students are transported the Mayfield Central School District and are eligible to participate in all Mayfield extra-curricular activities and sports teams.

## FOOTHILLS PTECH IN JOHNSTOWN AND MECO

Students attend classes at the PTECH Academy at Johnstown High School or Meco Elementary School and at Fulton Montgomery Community College for the whole day. Foothills PTECH currently has two academies for study: Health and Medical Sciences Academy at Meco Elementary School, and Computer Science and Game Arts Academy at Johnstown High School. Students who enter the Health and Medical Sciences Academy pathway can earn their Associates Degree in either Health Studies or Medical Administrative Assistant. Students who enter the Computer Science and Game Arts Academy pathway can earn their Associates Degree in either Business Administration, Business Marketing, Web and Mobile Applications Development, Digital Media Technology and Design, or Computer Information Systems. Participating students are transported by the Mayfield School District and still considered at Mayfield, and are eligible to participate in Mayfield extra-curricular activities and sports teams.

## Calculation of Cumulative Average and Class Rank

Calculation of cumulative average and class rank shall be calculated at the end of each school year for grades 9 through 11. The cumulative average and class rank for senior year will be calculated using senior year course grades, after the third marking period. All final grades for high school potential credit-bearing courses will be included in the calculation of cumulative grade average and class rank, including any high school courses taken as an accelerated eighth grader.

## Mayfield Junior-Senior High School Weighting System

The weighting system described below will be applied when calculating a student's final cumulative average for the purpose of determining class rank. The quality points will be added to the final grade average of each course designated as deserving of quality points. All weighted final course grades will be added together and divided by the total potential credits to determine the cumulative weighted grade average. Both the weighted and non-weighted cumulative grade averages will appear on the student's junior and senior year transcripts with a weighted class rank.
Formula for determining each course grade: Earned Grade + Quality Point = Weighted Grade

| Course Level | Course | Quality Points |
| :---: | :--- | :---: |
| Honors | English 9 Honors, English 10 Honors, <br> and English 11 Honors | +3 |
|  | Accounting, Advanced Studio Art, <br> Algebra II, Anatomy and Physiology, <br> College Calculus, College <br> Government, College Pre-calculus, <br> Elementary Italian I and II, English <br> 103, English 104, French IV and V, <br> Math Finance, New Visions Health, <br> Physics, Principles of Business, <br> Programming Logic and Design, <br> Spanish IV and V, Spreadsheets and <br> Databases, and SUPA Psychology | +4 |
| Advanced Placement College in the High School | AP US History and AP Biology |  |

## Selection Process for Valedictorian, Salutatorian, and Honor Guard in the Senior Year

The graduating student with the highest weighted cumulative grade average will earn the valedictorian designation. The graduating student with the second highest weighted cumulative grade average will earn the salutatorian designation. In addition to cumulative grade average, all candidates for valedictorian and salutatorian must meet the criteria listed below.

1. The student must be completing high school in a maximum of four years.
2. By graduation, all candidates will earn a Regents Diploma with Advanced Designation.
3. By graduation, all candidates will have earned a minimum of 16 units of credit in English, math, science and social studies, including a minimum one unit of credit at the college level or Advanced Placement level during their four years of high school.
4. Both the valedictorian and the salutatorian are expected to participate in the graduation ceremony. Under most circumstances, the valedictorian and the salutatorian would speak at graduation. The Mayfield Junior-Senior High School principal will review and approve speeches prior to graduation.
5. To be eligible for consideration for valedictorian or salutatorian graduation honors, the student must have been enrolled at Mayfield High School during their entire graduating year.

Selection Process for Honor Guard Designation: A designation of an "Honor Guard" will be bestowed upon those students with a weighted cumulative grade average of 90.0 or higher, with no rounding up, earning a Regents diploma.

