



2021-22



General
McLane
Program of
Study



School Profile

General McLane High School is a comprehensive high school serving approximately 750 students in grades nine through twelve. The school is the only high school in the General McLane School District which serves approximately 2000 students from a 117 square mile area.

The school offers classes to meet a diversity of students' needs and aptitudes. A variety of science and math courses ranging from abstract presentations to practical applications are offered. A comprehensive elective program is also offered including three foreign languages (Mandarin, French, Spanish), several music performing ensembles, technology education, business education, family living courses and programs in visual arts. In addition, classes in coding and computerized systems are offered. Grade point averages and class rank are computed using a weighted system whereby grades earned in accelerated classes are given stronger "weight" than those in other classes.

While the geographic area is classified as rural, the presence of Edinboro University in the district contributes to a unique student body. Approximately 8.5% of the student body is classified according to Pennsylvania standards as mentally gifted (Intelligence Quotient equal to 130 or greater). This compares to a national incidence of 2%. Approximately 73% of students pursue a four-year college program after graduation while another 12-15% pursue two-year programs. General McLane has consistently made Adequate Yearly Progress (AYP) as defined by No Child Left Behind (NCLB). All this makes for a stimulating and challenging environment in which to learn.

The requirements for graduation from General McLane High School are established by the General McLane School Board. The requirements set forth by the School Board satisfy the requirements established by the Commonwealth of Pennsylvania Department of Education. General McLane High School is accredited by the Pennsylvania Department of Education and a member of the Successful Schools Network.



General Regulations

1. All students must register for four (4) courses every nine-week term.
2. Pre-registration- When students access scheduling information via power-school, recommended courses will be listed. These courses have been prescheduled on the basis of the student's ability and recommendations from the faculty of the various departments. Deviations from those prescheduled courses should be discussed with the student's counselor.
3. Seniors must complete graduation requirements before being certified for graduation. Participation in graduation ceremonies occurs **ONLY** when the student has earned all credits, has met state testing requirements and has satisfied all obligations to the school.
4. An overall average of "B" in the academic curriculum is considered minimum for college recommendation.

Grade Level Assignments

- * Students with less than six (6) credits will be assigned to the freshman class.
- * Students with six (6) credits but less than twelve (12) credits will be assigned to the sophomore class.
- * Students with twelve (12) credits but less than twenty (20) credits will be assigned to the junior class.
- * Students with twenty (20) credits will be assigned to the senior class to fulfill graduation requirements.



Course Selection Instructions

The master schedule is arranged each year to accommodate student requests made during the course selection process in the previous year. Once the master schedule is created, changes **AFTER** its creation are limited to space available in courses. In order to ensure you receive appropriate and required courses, please read read the course descriptions and **prerequisites** carefully!

Counselors will meet with students in groups to distribute and explain course selection forms every year. Students will then be required to submit their course selections using their powerschool accounts. You and your parents should read and prepare your course selections. If you have any questions or concerns regarding your schedule, please schedule an appointment to meet with your guidance counselor.



Schedule Changes

Students should consider course selections very carefully. A student's schedule should provide the best possible preparation for further education or a job. For the school, course selections determine the scheduling of classes, the need for teaching staff and instructional budget for the year. For this reason, schedule changes are discouraged after the summer deadline. **Please be advised that even if the requested change is a legitimate, courses will not be overloaded.**

Students may ADD/DROP courses only until posted deadline, which will be reported to students during the summer on the school's website. All schedule change requests must be submitted using a schedule change request form located in the guidance office and on our website. Schedule changes will be limited to the reasons listed on the form. **Requests for specific teachers or course periods will not be granted.**

After the quarter/semester begins, a student may request to withdraw from a course with one of the notations listed below entered on his or her transcript. The withdrawal process requires parent, teacher, and guidance counselor permission. Students are strongly encouraged to challenge themselves and work to the best of their ability before considering this option. **Please be advised that this may endanger your athletic eligibility, graduation status, and/or affect college program admissibility. You may not withdrawal from a course and then complete it in a summer remediation program.**

WP – Withdrawn Passing – If the student's total average for the course to date is a passing one. This is reserved for unique circumstances only.

WF – Withdrawn Failing- If the student's total average for the course to date is a failing one, or if the student is removed from a course due to behavioral or attendance issues.

No credit is given for a course from which a student withdraws.



Basic Graduation Requirements

To be eligible for a diploma from General McLane High School, a student must complete a prescribed set of courses and credits as well as a career exploration portfolio. Credits toward graduation are accumulated beginning with grade nine. Graduation requirements are as follows:

<u>Course</u>	<u>Required Credit</u>
English	4.00
Social Studies	3.00
Science	3.00
Mathematics	3.00
College and Career Readiness	.50
Driver Education	.25
Physical Education	1.50
Health Education	.75
The Arts (menu)*	1.00
Technology (menu)*	1.00
Approved Electives	10.00
Total Credits	28.00

The normal sequence of required courses for meeting graduation requirements:

<u>Grade 9</u>	<u>Credits</u>	<u>Grade 11</u>	<u>Credits</u>
English 9	1.00	English 11	1.00
U.S. History I	1.00	Civics & Economics	1.00
Science	1.00	Mathematics	1.00
Mathematics	1.00	Science	1.00
Physical Ed	.50	College & Career	.50
Health	.50	Coed Physical Ed	.25
Electives	<u>3.00</u>	Health	.25
Total	8.00	Electives	<u>3.00</u>
		Total	8.00

<u>Grade 10</u>	<u>Credits</u>	<u>Grade 12</u>	<u>Credits</u>
English 10	1.00	English 12	1.00
U.S. History II	1.00	Physical Education	.50
Science	1.00	Electives	<u>6.50</u>
Mathematics	1.00	Total	8.00
PE10 / DE	.50		
Electives	<u>3.00</u>		
Total	8.00		



Arts Elective Menu

*Students can only use a class for one of the elective menus. For example, a student can not use Photography I as an Art Elective AND a Computer Elective.

Art

All Art Courses listed in this Program of Study Booklet are included as Art Electives.

Business

Newspaper (.50)

Social Media & Marketing (.50)

English

Acting & Set Design (.50)

Literature & Film (.50)

Yearbook (.50)

Family Living

Culinary Arts I (.50)

Culinary Arts II (.50)

Fun Foods (.50)

Lancer Pantry (.50)

Erie County Technical School

Vocational Technical Classes (1)

Music

Acting & Set Design (.50)

Acting & Set Design for Musicals (.50)

Brass Ensemble (.50)

Broadway Dinner Choir 9 & 10 (.50)

Broadway Dinner Choir 11 & 12 (.50)

Concert Band 9 & 10 (.50)

Electronic Music (.50)

GM Jazz 9 & 10 (.50)

GM Jazz Big Band (.50)

Guitar Ensemble (.50)

History of Jazz (.50)

History of Rock & Roll (.50)

Holiday Choir 9 & 10 (.50)

Holiday Choir 11 & 12 (.50)

Holiday Symphonic Winds (.50)

Jazz Improvisation I (.50)

Jazz Improvisation II (.50)

Madrigal Singers (.50)

Marching Band (.50)

Spring Concert Choir (.50)

Spring Symphonic Winds (.50)

Vocal Jazz Ensemble (.50)

Wood Ensemble (.50)

Technology

Architectural Design I (.50)

Architectural Design II (.50)

Home Maintenance (.50)

Intro to Wood (.50)

Intro to Metal (.50)

Media Arts (.50)

Wood Production Systems (.50)

Metal Production Systems (.50)



Technology Elective Menu

*Students can only use a class for one of the elective menus. For example, a student can not use Photography I as an Art Elective AND a Computer Elective.

Art

Graphic Design I (.50)
 Graphic Design II (.50)
 Photography I (.50)
 Photography II (.50)
Video I (.50)
Video II (.50)

Business

Accounting (.50)
 Digital Literacy (.50)
 Intro to Accounting (.50)
 Newspaper (.50)
 Social Media & Marketing (.50)
College & Career Readiness (.50)
Computer Applications (.50)
Multimedia I (.50)
Multimedia II (.50)
Word Processing (.50)

English

Creative Writing (.50)
 Literature & Film (.50)
 SAT Prep (.50)
 Yearbook (1)

Erie County Technical School **Vocational Technical Classes (1)**

*****Courses that are no longer offered.***

Mathematics

Coding I (.50)
 Coding II (.50)
 Math K'Nextions (.50)
Computer Mathematics (.50)
Mathematical Programming (.50)

Technology

Architectural Design I (.50)
 Architectural Design II (.50)
 Computer Animation (.50)
 Drone I (.50)
 Drone II (.50)
 Engineering Design I (.50)
 Engineering Design II (.50)
 Engineering Experiences (.50)
 Home Maintenance (.50)
 Intro to Metal (.50)
 Intro to Wood (.50)
 Innovation & Invention (.50)
 Metal Production Systems (.50)
 Media Arts (.50)
 Power Technology (.50)
 Robotics/CNC Technology (.50)
 Wood Production Systems (.50)
Advanced Power Technology (.50)
Webmaster I (.50)

Music

Electronic Music (.50)



Academy Information

Education Academy (Course#003)

.50 credit

Students who are considering a career in education will have the opportunity to travel to Edinboro Elementary School or JWPMS to participate in classroom activities that will enhance their understanding of the field. Students will be asked to keep a portfolio of their experiences. Travel outside of GMHS is a requirement of this opportunity. Certain opportunities may present themselves at GMHS by specific arrangement. This course may be taken more than once.

Manufacturing Academy

- Cooperative Program between 6 Manufacturing Partners and General McLane High School.
- Students are selected based on a strong interest in a technology related fields.
- Includes tours of Manufacturing Facilities, one day job shadows, senior year semester 2 possible internships.

The Academy of Medical Arts and Engineering

The Academy of Medical Arts and Engineering is a school within a school, created to prepare students in grades ten through twelve for careers in medicine and engineering or STEM related fields. Through partnerships with local businesses, hospitals and universities. Academy classes are enriched with hands-on activities designed to provide students with quality live-learning experiences. Acceptance into the Academy is based upon both student's achievement in freshman-level accelerated courses, and the willingness to commit to the rigorous academic challenges presented through Academy coursework. Academy students are required to take a prescribed curriculum, participate in specific, Academy-related activities and field trips, and complete shadowing experiences with the Academy partners.

*The Academy will accept a maximum of twenty freshman students each year. *Students invited to apply have completed the required core freshman courses: Algebra II Accelerated, Biology I Accelerated, English 9 Accelerated or Advanced, and US History I Accelerated, and maintained a GPA of 3.6 or greater.



Erie County Technical Curriculum

Students attending the Erie County Technical School divide their day equally between General McLane High School and the Erie County Technical School. The purpose of technical training is to develop skills that will enable the students to enter a college, technical institution or enter directly into the world of employment at the completion of the course. Students make a one, two or three year commitment and may begin at ECTS in grades 10, 11, or 12. The following labs are available at the ECTS.

Art & Design for Business
 Auto Body Repair
 Automotive Technology
 Computer Programming
 Construction Trades
 Cosmetology
 Culinary Arts
 Drafting & Design
 Early Childhood Education
 Electrical Engineering

Electronics
 Facility Maintenance
 Graphic Communications
 Health Assistant
 Metal Fabrication
 Precision Machining

Junior/Senior Programs:
 Computer Networking
 Tourism & Hospitality Mgmt

Suggested four-year Technical Curriculum

<u>Grade 9</u>	<u>Credits</u>	<u>Grade 11</u>	<u>Credits</u>
English 9	1.00	English 11	1.00
U.S. History I	1.00	Mathematics	1.00
Science	1.00	Science or US Hist II	1.00
Mathematics	1.00	Coed Phys Ed	.25
Physical Ed	.50	Health	.25
Health	.50	ECTS Lab	4.00
Electives	<u>3.00</u>	Elective	<u>.50</u>
Total	8.00	Total	8.00

<u>Grade 10</u>	<u>Credits</u>	<u>Grade 12</u>	<u>Credits</u>
English 10	1.00	English 12	1.00
Science or US Hist II	1.00	Civics & Economics	1.00
Mathematics	1.00	Science	1.00
PE 10/Driver's Ed	.50	Physical Ed	.50
Elective	.50	Elective	.50
ECTS Lab	<u>4.00</u>	ECTS Lab	<u>4.00</u>
Total	8.00	Total	8.00



Non-Traditional Courses

NON INSTRUCTIONAL PERIODS

Non instructional periods are of two basic types. These include: student apprentice periods and release periods. Seniors may participate in student apprentice of those two options for a maximum of two (2) scheduling units. Juniors may participate in one (1) scheduling unit of a student apprentice period. No academic credit will be given for release periods.

Student Apprentice (Course #770)

.25 credit

Students working with teachers may be involved in any of the following areas: tutoring, correcting objective tests, making bulletin boards and displays, typing and routine clerical tasks. Students working in the office will be assigned one or more of the following duties: typing, filing, answering the telephone, running photocopies, delivering messages to teachers, distributing the daily attendance report, and helping with routine clerical tasks.

One nine week course

elective

prerequisite: Approval of the administration and the teacher,

grades: 11, 12

if the student is working with a teacher. Administration approval is necessary to work in the office.

Release Period (Course # 671,672,673,674)

.00 credit

Seniors may request early release a maximum of two terms provided they:

- are registered for all required graduation credits
- are carrying a load of at least seven credits
- have written permission of a parent or guardian
- do not owe obligations to the school

Release students must agree to not be in the school building during the release time without prior permission from an administrator and follow the school schedule on early dismissal days, activity periods days, etc. students will not be granted release unless they have earned or have the potential to earn enough credits to earn a diploma.

Independent Study (Course # 075)

Up to 1 credit

Any student interested in scheduling the Independent Study must obtain an approval form in the guidance office.

**elective
grades: 12**



Grade Point Average

The following method is used in deriving a student's grade point average: Grade point average is determined by adding the total number of points that a student has earned and dividing that number by the number of credits a student had attempted, i.e.: At the end of grade 11 a student had attempted 20.25 credits and has earned 78.5 points, his grade point average would be 3.87 (78.5 divided by $20.25 = 3.87$). The following table outlines point totals.

<u>Grade</u>	<u>Points</u>
A	4
B	3
C	2
F	0

When multiplying, grades earned in accelerated classes are given a weight of 1.2. Academic level classes are given a weight of 1.0.



NCAA: Planning on College Athletic Career

Qualifying for athletic financial aid and participation at specific colleges (determined by Division status) depends on completion of a NCAA prescribed core of courses beginning in grade 9, as noted in your annual sports physical packet. Students' high school grade point average along with the standardized test scores (SAT and/or ACT) will also determine one's qualifying status. When you register for the SAT/ACT, you must request through your online registration account to have your SAT/ACT test scores sent directly to NCAA (**The code is 9999**).

The NCAA Clearinghouse form should be filed after the completion of the student's junior year. **Seniors** must be certified with the NCAA Clearinghouse to be qualified with a specific college. Final qualifying status occurs upon graduation. Detailed and updated information on applying for certification with the NCAA Clearinghouse is available on the NCAA Website www.eligibilitycenter.org.



Dual Enrollment

The Dual Enrollment Program allows eligible students to apply for enrollment in college classes. By participating, these students are able to receive both high school elective credit and college credit for courses successfully completed. College credit is transferred at the discretion of the receiving university or college. Students cannot substitute Dual Enrollment Courses for core courses required for graduation at GMHS. Students will be financially responsible for the courses and additional costs associated with these courses.

Dual Enrollment Courses are courses that are taken by high school students on the respective college campus, such as Edinboro University. Students must apply and be accepted by the participating college. It is important to note that Dual Enrollment Courses are not included in GMHS GPA. Participation in these programs may affect student's opportunity for valedictorian and salutatorian.

A number of criteria must be met. Please contact GM Dual Enrollment Coordinator, Mr. Scott Korb.



Career Shadowing

The Career Shadowing Program is designed to provide students with a one-day opportunity to “follow” a person performing a job in which the student may have an interest. This experience is an important part of helping students determine job components with which they feel comfortable and to motivate students along the path of career goal setting. This opportunity is open to juniors and seniors. A successful Career Shadowing experience motivates students to pledge a serious commitment toward career goals. The Career Shadowing Program runs during the school year starting in October and continues to the end of April.



Senior By-Pass

Students who opt for the senior by-pass must meet the following criteria:

- Contact the guidance office by **November 1** of their junior year. Students may be required to have a minimum GPA and SAT score to be considered eligible by individual colleges.
- Complete a senior by-pass proposal including college courses to be taken, parental approval, and the recommendation of the guidance counselor. The proposal must be submitted to the principal for approval by **February 28** of the student's junior year.
- Proof of approval of senior by-pass program will be contingent upon acceptance by an accredited college or university.

Students intending to pursue a senior by-pass program must take the required core credits for graduation during the junior year and are required to fulfill all regular graduation requirements by the end of their junior year.



Art Department

Art Introduction (Course # 755)

.50 credit

The Art Introduction class is taught as a survey course. Students will study and gain experience in art criticism, art history and art production. In the area of production, students will work in drawing, design, painting, and sculpture. Students will critique artwork and discuss aesthetic and historic merits Individually and in group settings. Students will practice studio techniques while creating original works in each of the media areas listed above. Students may have occasional homework assignments.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Artistic Metalsmithing (Course # 752)

.50 credit

Introduction of basic metalsmithing and jewelry design techniques. Students will work hands-on on a series of projects to develop 3-D design skills and to create works that express individual ideas. Emphasis will be on metalsmithing as an art medium. Students will study metalsmithing techniques to create fine art jewelry and metal sculpture. Course covers metalsmithing processes, materials, tools and equipment, as well as historic and contemporary jewelry design. Topics include sawing, cold connecting sheet metal, stone setting, enameling, soldering, casting, craftsmanship, and studio safety.

one nine week course

elective

prerequisite: Art Introduction

grades: 9, 10, 11, 12

Ceramics (Course # 750)

.50 credit

This course will serve as an introduction to the process of working in clay. Hand building techniques including coil, slab and slip cast as well as additive and/or subtractive sculptural techniques will be explored. Attention to detail, craftsmanship and a serious dedication to the art process is expected.

one nine week course

elective

prerequisite: Art Introduction

grades: 9, 10, 11, 12

(recommended for grades 10, 11, 12)

Drawing I (Course # 742)**.50 credit**

Drawing I is designed to improve students drawing techniques, as well as teach students how to compose original works of art. Emphasis is placed on the process of seeing (visualization), the Elements and Principals of Art, different drawing media and application techniques. Attention to detail, craftsmanship, and a serious dedication to the art process is expected. Students are also required to have a sketchbook for the course.

one nine week course**elective****prerequisite: Art Introduction****grades: 9, 10, 11, 12****Drawing II (Course #744)****.50 credit**

A course that extends the concepts and techniques covered in Drawing I. Extensive study of formal compositional principles: balance, unity, variety, rhythm, and movement will be explored. Creative application of materials and techniques will be employed in the creation of more in depth illustrative projects. Attention to detail, craftsmanship, and a serious dedication to the art process is expected. Students are also required to have a sketchbook for the course.

one nine week course**elective****prerequisite: Drawing I****grades: 10, 11, 12****Graphic Design-Illustration (Course #758)****.50 credit**

Digital Art Illustration. Students learn how to use the tools to create digital artwork that can be used in web design, print media, and digital screen design. In this Illustration course, it will concentrate on the high-end capabilities of Adobe software as an illustration, design and vector drawing tool. Students will learn how to use the software: Adobe Illustrator & Adobe Fresco to create high quality illustrations, logos, and other custom artwork. This digital illustration course gives students an overview of how computer software is used in illustrations. A variety of imaging programs are discussed, and students learn how to digitally create vector images, apply colors, use textures and take advantage of the flexibility associated with computers. Instruction takes place primarily through class projects and demonstrations. It is recommended that you also sign up for the course Graphic Design Photoshop to complete the understanding of Graphic Design. Students will need to successfully complete this course and Graphic Design Photoshop as a prerequisite for Graphic Design II.

one nine week course**elective****prerequisite: recommended Art Introduction****grades: 9,10, 11, 12**

Graphic Design-Photoshop (Course #759)

. 50 credit

Digital Art in Photoshop. This course is an art course that concentrates on the high-end capabilities of Adobe Photoshop as an illustration, design and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos and graphics. Students in this course will also explore color theory, digital painting. It is recommended that you also sign up for the course Graphic Design Illustration to complete the understanding of Graphic Design. Students will need to successfully complete this course and Graphic Design Illustration as a prerequisite for Graphic Design II.

one nine week course

elective

prerequisite: recommended Art Introduction

grades: 9,10, 11, 12

Graphic Design II (Course #757)

.50 credit

Advanced Digital Art. This course is continuation of concepts learned in Graphic Design-Photoshop & Graphic Design-Illustration. Applying basic design concepts to the presentation of informative or persuasive material, students will develop their craft in practicing effective visual communication. The course emphasizes practical assignments that examine applied problem solving and professional solutions for graphic designers.

one nine week course

elective

**prerequisite: Graphic Design-Illustration &
Graphic Design-Photoshop**

grades: 9, 10, 11, 12

Hand Lettering and Illustration (Course #758_1)

.50

credit

This course is designed to show students how to create and design like an illustrator while incorporating hand-lettering techniques. Illustration is a fancy name for commercial art such as a book, greeting card, magazine, advertising, product packaging, or branding. Hand-lettering refers to the art of drawing letters by hand. This course will combine illustration and hand-lettering to help students define their personal style by having choice over which projects they wish to create. They will also participate in creativity-boosting drawing exercise drawing exercises that will help hone a students style through exploring a myriad of different art materials, techniques, and equipment such as painting with inks, creating in virtual reality, and printmaking. This class is designed for the student who wants to see their creativity be pushed, to learn what it looks like to be a working illustrator, and to explore new ways of creating art through experimentation.

one nine week course

elective

prerequisite: none

grades: 9,10,11,12

Painting I (Course # 741)

.50 credit

This course will place emphasis on color dynamics through the study of various color relationships beyond those already learned in Art Introduction. Brush stroke techniques and blending color to create form and depth will be emphasized and practiced. Students are encouraged to carefully plan each project through sketching and experimentation with color. Skills learned in Art Introduction are essential to the success of this course. Attention to detail, craftsmanship and a serious dedication to the art process is expected.

one nine week course

elective

prerequisite: Art Introduction

grades: 9, 10, 11, 12

Painting II (Course #745)

.50 credit

A course that extends the concepts and techniques covered in Painting I. It incorporates various paint application techniques while focusing on compositional organization. Students will be exposed to numerous styles and approaches to historical and contemporary painting. Attention to detail, craftsmanship and a serious dedication to the art process is expected.

one nine week course

elective

prerequisite: Painting I

grades: 9, 10, 11, 12

Phone Photography (Course #748)

.50 credit

Smartphone photography can be considered the 21st-century equivalent of Polaroid-style photography, having its own aesthetic. The course will present a disciplined methodology in order to develop a sophisticated photographic language making use of new technologies. It includes an overview of photographic traditions and the work of master photographers, and addresses the problem of taking pictures involving a variety of subjects and topics in various light conditions. It combines theory, and technical training, and on-site and off-site photoshoots. Students will learn to post-process photos using smartphone apps. Students need to be equipped with a smartphone, and may wish to invest in optional extra lenses and equipment such as tripod or ring light.

one nine week course

elective

prerequisite: Must own a smartphone

grades: 9, 10, 11, 12

Photography I (Course #746)**.50 credit**

This photography course introduces students to photography through a combination of lectures, demonstrations, assignments, and critiques. Students will learn to see photographically via an exploration of the basic tools, techniques and aesthetics of photography, with an emphasis on the creative use of camera controls, this course will also introduce students to the digital darkroom post processing of digital captures. Methods of transferring files from camera to computer, basic digital asset management, image editing tools using Adobe Lightroom and Photoshop, optimizing files for print and screen, image sharpening, proper understanding of black and white tonal scale, methods of color photography. All photography is completed in natural light during the daylight after school hours. During the in-person class time, students will work in the digital dark room to process photos & learn about new photography concepts. Students must own a digital camera for this course, not a phone camera. The digital camera must be at least 10mp and have at least a 10x optical (not digital) zoom. Printing is included. ***Required \$20.00 lab fee.***

one nine week course**elective****prerequisite: Grade 10+ must own appropriate digital camera. grades: 10, 11,12****Photography II (Course #747)****.50 credit**

This DSLR photography course is a level 2 course for students who have successfully completed photography 1. Photography will be taught through a combination of lectures, demonstrations, assignments, and critiques. Students will pair seeing photographically with the more technical side of operating a DSLR camera. This course will be an exploration of camera controls, such as aperture, shutter speed and ISO (exposure) and focusing techniques. The class will have in-person photography lab assignments each week. Photography Photoshoot assignments will also be completed in natural light during the daylight after school hours. During the in-person class time, students will work in the lab and in the digital dark room to process photos in Adobe Lightroom and Adobe Photoshop. Students must own a DSLR camera for this course. The DSLR camera will need: MANUAL mode, any lens will be satisfactory. The camera must be at least 10mp. Printing is included. ***Required \$20.00 lab fee.***

one nine week course**elective****prerequisite: passed photography I,
must own DSLR camera****grades: 10, 11, 12**



Business Education

Accounting I (Course #580)

.50 credit

This is a continuation of Intro to Accounting where students will learn the procedures used to keep the financial records for a merchandising business. Basic principles learned can also be applied to various personal finances. It is highly recommended that students planning to major in any business or business-related major in college take Intro to Accounting, as Accounting is a required course for all college business majors.

one nine week course

elective

prerequisite: Intro to Accounting

grades: 10, 11, 12

College & Career Readiness (Course # 556)

.50 credit

In this course, students examine their own interests, abilities, temperaments, and goals to determine which career areas are best suited for them. Students will be exposed to all career clusters and research specific careers which apply to their own individual career focus. Students will establish an electronic career portfolio as part of this course. College & Career Readiness is required of all 11th grade students as a graduation requirement.

one nine week course required

prerequisite: none

grades: 10

Digital Literacy (Course # 596)

.50 credit

This course will help students learn essential software applications and technology skills for personal, academic, and professional success and help increase their productivity. Students will develop and refine keyboarding skills for speed and accuracy. Word processing and desktop publishing applications will be used to create, edit, manipulate, and format personal, academic, and business documents. Students will create a digital presentation which includes appropriate text formatting, graphics, animation, and public speaking skills. Formulas will be used in spreadsheet applications to solve mathematical problems and evaluate investments and loans and a variety of charts will be created.

one nine week course

recommended elective

prerequisite: none

grades: 9, 10, 11, 12

Intro to Accounting (Course #582)

.50 credit

This is an introductory accounting course where students will learn the concepts and procedures used to keep the financial records for a service business. Basic principles learned can also be applied to various personal finances. It is highly recommended that students planning to major in any business or business-related major in college take Intro to Accounting, as Accounting is a required course for all college business majors.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Intro to Business (Course #593)

.50 credit

This course provides opportunities to learn and experience a variety of topics in the field of business. Students will use an online simulation to invest in the stock market and learn about stocks, bonds, mutual funds, and help prepare them for financially independent futures. Types of businesses, business in a global economy, and business management will be covered. Students will examine the fundamental principles of entrepreneurship and small business, the characteristics of an entrepreneur, and how to identify business opportunities. Students will use an online simulation to run a retail business, explore the operational aspects of starting a business, and write a business plan. Students will be researching, problem-solving, collaborating, and presenting throughout the course.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Newspaper (Course # 161)

.50 credit

In this hands-on course students will produce our school newspaper, the Lancer Ledger. This course combines the fundamental elements of journalism concepts, business aspects of newspaper production, and desktop publishing with essential design basics to give students an authentic experience in the field of journalism. While engaging as staff writers and participating in the editorial aspects of newspaper production, students will explore various styles and techniques of journalistic craft. Students will develop business and marketing strategies appropriate for newspaper circulation, advertising, and budgeting including the use of social media as a marketing tool. Students will learn to use the robust, industry-standard software, Adobe InDesign to create visually enticing print media, and will learn to maintain a WordPress-based website. Students taking this class should have a high level of maturity and an interest in writing articles for a student audience.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Retail Management (Course # 590)

.50 credit

This course applies classroom theory to the actual operation of the school's student store. Students assume full responsibility for the entire operation of the store - advertising and promotions, accounting, merchandising, inventory, pricing, purchasing, scheduling, and selling.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Social Media and Marketing (Course #562)

.50 credit

In today's rapidly-evolving media landscape, social media has not only become a fundamental tool for communication, but a must-have skill in a multitude of industries. In this class, students will be introduced to marketing and its essential role in the operation of a business and in our economy. They will gain insight into the functions of marketing and will be introduced to basic marketing concepts including the marketing mix and target marketing. They will then dive into the role of social media in marketing communications, learning how to use social media and content marketing to grow a business and engage with customers. **Students taking this course must have access to a smartphone** as they will be learning to create a social media presence for businesses using popular outlets such as Facebook, Twitter, Snapchat, Pinterest, You Tube, Instagram, etc.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Study Skills (Course #050)

.50 credit

Study Skills is a course designed to help students acquire the necessary "student skills" to become successful in school and later in the work place. Topics include goal setting; time management; effective study environment, learning styles; effective note taking, test preparation, and memory devices. Students will use the WIN program's soft skills to learn about the behavioral, attitudinal, and social skills employers are seeking.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Youth and Finance (Course # 595)

.50 credit

In this course, students will learn the importance and processes of managing their finances and "growing" their money. Topics include the cost of living independently, budgeting, banking, savings and investments, credit and insurance.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12



Computer Science

AP Computer Science Principles with Swift (Course #338)

1 credit

AP Computer Science Principles with Swift is a semester course designed to introduce new and experienced programmers all aspects of app development while helping prepare them for the AP Computer Science Principles exam. Students explore how apps affect our society, our economy, and our culture. They also build a solid foundation in programming fundamentals using Swift as the language. Throughout the course, students get practical experience with the tools, techniques, and concepts needed to build a basic iOS app. Lessons take them through the process of designing an app that includes brainstorming, planning, prototyping, and evaluating apps of their own. And they learn user interface design principles-essential to programming and making great apps.

one semester course

elective

App Development with Swift (Course #339)

.50 credit

App development with Swift is a nine-week course designed to teach specific skills related to either Swift or app development. Students complete guided projects that include a description of user-centered features, a project, plan, and instructions for designing and building a fully functioning app. Through these projects, students can create features that interest them, all while performing the type of work they can expect in an app development workplace.

one nine week course

elective

Architectural Design I (Course #634)

.50 credit

Students will design their own residential dwelling and draw a set of working plans for that design. Drawings will be completed using an architectural design software. Drawings to be completed include floor plans, elevations and a 3-D model.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Architectural Design II (Course #638)

.50 credit

This course is a continuation of Architectural Design I with students learning how to design individual rooms of a residential dwelling taking into consideration traffic flow through the house. Using an architectural design software, students will create a set of working drawings based on their designs. Drawings to be completed include floor plans, elevations, 3-D models and a walk-through.

one nine week course

elective

prerequisite: Architectural Design I

grades: 9, 10, 11, 12

Coding I (Course #360)

.50 credit

By solving puzzles in a dynamic 3D puzzle world, students will develop a set of coding skills to build up their basic programming vocabulary. Their coding journey begins with simple commands, functions, and loops. From the start, they will write real Swift code-the same code used by real programmers. Then students will build on their fundamental knowledge of Swift. They will journey beyond simply solving puzzles and create worlds of their own. They will learn about variables and types, the coding constructs that allow them to store and access information. These new skills, along with initialization and parameters, will give them even more ways to use code to interact with their characters and the puzzle world, allow them to change the rules of the world itself.

one nine week course

elective

prerequisite: none

Coding II (Course #361)

.50 credit

Coding II is a nine-week course where students will expand their coding skills to start thinking more like an app developer. Students will build a set of creative tools as they explore powerful coding concepts that professional developers use. They will learn about graphics and coordinates, they'll be able to manipulate images, and they'll combine these techniques with touch events to paint artistic shapes in space. Students will explore event handlers using real events, such as finger movements or taps, to trigger their code.

one nine week course

elective

prerequisite: Coding I

Computer Animation (Course #349)

.50 credit

Students will use a professional computer animation tool to study two-dimensional animation as it pertains to web development. The animation will be used to enhance the content and design of a web page.

one nine week course

elective

prerequisite: none

Digital Literacy (Course #596)**.50 credit**

This course will help students learn essential software applications and technology skills for personal, academic, and professional success and help increase their productivity. Students will develop and refine keyboarding skills for speed and accuracy. Word processing and desktop publishing applications will be used to create, edit, manipulate, and format personal, academic, and business documents. Students will create a digital presentation which includes appropriate text formatting, graphics, animation, and public speaking skills. Formulas will be used in spreadsheet applications to solve mathematical problems and evaluate investments and loans and a variety of charts will be created.

one nine week course**prerequisite: none****recommended elective****grades: 9, 10, 11, 12****Drone I (Course #480)****.50 credit**

Drone I is a course designed to explore a variety of subjects as they relate to drones. This course will include elements of the following topics: Safety, Batteries Chargers and Connectors. Design and Documentation, Drone Overview and Flight Basics, Common Sense Flying, Fundamentals of Flight, FAA Regulations, Beginning Flight Skills, Transmitters and Receivers, Propellers, Drone Maintenance and Battery Care. While using a real toy drone a student will then learn the basic principles of aerodynamics.

one nine-week course**prerequisite: Intro to Physics or Physics 1 or Physics 1 Acc.****grades: 11, 12****Drone II (Course #481)****.50 credit**

Drone II is a course designed to explore a variety of subjects beyond the Drone I course as they relate to drones. This course will include elements of the following topics: Review of Flight Basics and Common-Sense Flying, Advanced Flight Skills, Electric Motors, Flight Controllers, Air Frames, Cameras and Gimbals, Efficiency versus Performance, Ground Control Stations and First-Person View. While using a real toy drone a student will then learn the basic principles of aerodynamics.

one nine-week course**prerequisite: Drone I****grades: 11, 12****Introduction to Unmanned Aerial Vehicles****grades: 11, 12**

An introduction to unmanned aerial vehicles (UAVs) commonly know as drones, as well as the FAA regulations, operations, weather, safety and airspace knowledge required to obtain the FAA part 107 license necessary to operate an UAV for commercial use. The course is four hours of instruction per week for fifteen weeks.

Engineering Design I (Course #635)**.50 credit**

This course provides an introduction to computer aided drafting, CNC machining and the engineering design process. Student will use CA software to compete multi-view projections with dimensions as well as 3-D models. Using CAD drawings students will learn how to produce parts on a CNC machines. Students will also be introduced to the engineering design process. (This course replaced CAD I).

one nine week course**elective****prerequisite: none****grades: 9, 10, 11, 12****Engineering Design II (Course #636)****.50 credit**

This course is a continuation of Engineering Design I with students learning more advanced CAD and CNC concepts. Students will use CAD software to complete 3-D models incorporating section views, auxiliary views and working drawings. Students will use the engineering design process to design a product to be produced utilizing advanced CNC machining concepts.

one nine week course**elective****prerequisite: Engineering Design I****grades: 9, 10, 11, 12****Graphic Design-Illustration (Course #758)****.50 credit**

Digital Art Illustration. In this course students will use Adobe Illustrator to create digital art Illustrations. Classes are designed to give students an understanding of composition, color, design graphics, product design, logo design, typography, character design, poster design, and how to draw digitally using vector based graphics. Students will need to take both this course along with Graphic Design-Photoshop to be eligible for the Graphic Design II course. Art Introduction is recommended prior to taking this course, but not required.

one nine week course**elective****prerequisite: recommended Art Introduction****grades: 9, 10, 11, 12****Graphic Design-Photoshop (Course #759)****.50 credit-**

Digital Art Photoshop. This course is an introduction to art in the digital world. Students will learn how to create digital artwork using the graphic design industry standard program Adobe Photoshop. Students will learn to manipulate photographs as well as create digital photographic artwork. Classes are designed to give students an understanding of color, design, and digital painting. This course recommends that students to have a digital camera: 10.0 megapixels, 3x optical zoom or higher or students may use the school issued iPad (iPad photos will not capture the same quality as an actual camera) to capture photos for the assignments. Students will need to take both this course along with Graphic Design-Illustration to be eligible for the Graphic Design II course. Art Introduction is recommended prior to taking this course, but not required.

one nine week course**elective****prerequisite: recommended Art Introduction****grades: 9, 10, 11, 12**

Graphic Design II (Course #757)**.50 credit**

This course is a continuation of the concepts learned in Graphic Design I. Students will take their digital art creation to the more advanced level. More independent/creative projects will be encouraged. This course recommends that students to have a digital camera: 10.0 megapixels, 3x optical zoom or higher.

one nine week course**elective****prerequisite: Graphic Design-Illustration & Graphic Design-Photoshop****grades: 9, 10, 11, 12****Inventionland (Course #629)****.50 credit**

GM is now offering an innovative 21st century learning curriculum designed to teach career readiness, design, and problem solving skills. (Inventionland is America's largest private invention factory whose unique makerspace and "cool office" environment draws visitors worldwide.) Inventionland 9-step inventing method has helped Inventionland innovate and develop new products for years, these methods are now being taught in an educational setting. This course will revolved around real-world ideas, embracing creativity, engineering/prototype design storytelling, marketing, and more.

one nine week course**elective****Media Arts (Course #163)****.50 credit**

Media Arts is a communications class. We focus on storytelling with the use of cameras and editing programs. Students will also enrich their technology skills using apps such as Google Docs, Google Drive, Wordpress (web design) and You Tube. Students will have the opportunity to create a portfolio creating video stories within their interests connected to our school. School Announcement projects will be selected to be shown to the rest of the school during Advisory.

one nine week course**elective****Photography I (Course #746)****.50 credit**

Beautiful Photos! This course is an introduction to digital photography. Students will learn to take well-composed photographs and post process them in Adobe Photoshop. This course requires students to shoot photo assignments over each weekend within the course duration. All photography is done after school hours and outdoors. Students will be expected to explore creative and unique locations (local) for their photo shoot. This course requires students to have a digital camera: 10.0 megapixels, 3x optical (not digital) zoom or higher. Students will also have a \$20 lab fee.

one nine week course**elective****prerequisite: 10th grade + must own appropriate digital camera****grades: 10, 11, 12**

Photography II (Course #747)

.50 credit

Your Inner Photographer will be revealed! This course is an advanced study of photography, for the serious photography student. Students will learn the mechanics of a DSLR camera. DSLR cameras, or cameras that can be set to manual mode are recommended for the course. This course will build upon concepts learned in photo 1, however students will learn to have more control over their camera using manual settings. All photo shoots will be outdoor, after school hours. Each weekend students will have a photo shoot assignment requiring them to possibly travel to unique (local) locations. Daylight hours are needed during the weekend to capture homework assignments. This course requires students to have a digital camera: 10.0 megapixels, 3x optical zoom or higher (DSLR recommended). Students will have a \$20 lab fee.

one nine week course

elective

prerequisite: passed photography I

must own appropriate digital camera

Robotics & CNC Technology (Course #628)

.50 credit

In this course students examine the different types, uses, power systems, and control techniques for robotics. Through lab experiments, student use the Scorbot robot to gain experience and develop their own practical use of the robot. In the CNC unit, students develop a basic understanding of machining, processor language and programming of the CNC mill, lathe and router. The course concludes with the study of Master CAM software and how to apply it to design and machining a product.

one nine week course

elective

prerequisite: none

grades: 10, 11, 12



Drivers Education

Behind the Wheel Driver Education

0.00 credit

Behind the wheel driver's training affords the student the opportunity to learn to drive an automobile. From the basic fundamentals, the student moves to more complicated maneuvers such as getting out of skids and thruway driving.

(Scheduled by arrangement. Fee required)

Drivers Ed/Classroom & Phys Ed -Grade 10 (Course # 810)

.50 credit

Classroom driver's education affords the students an instructional background for driving a car. This course is taken in conjunction with PE 10. The PE 10 course meets for 4 1/2 weeks and the emphasis is on physical fitness and the team sports offered in PE9. There is also more emphasis on character education, team cohesiveness and cooperative games.

one nine week course

required



English

Acting and Stage Design (Course # 168)

.50 credit

This course will approach acting as the realistic portrayal of emotions. Students will improve their volume, facial expressions, gestures, and movement to present real emotions to an audience. Course material includes styles and techniques of acting along with a technical knowledge of stage lighting and set design. Each student will perform five monologues and will act in several group scenes including a combat situation.

one nine week course**prerequisite: none****elective****grades: 9, 10, 11, 12**

Advanced Public Speaking (Course #162)

.50 credit

The rewards for acquiring public speaking skills are many. Speaking clearly and comfortably in public is a valuable and often essential skill to possess. This course will give you the opportunity to develop and strengthen skills in preparing and presenting public oral presentations in a variety of situations. It will also sharpen your skills in critical listening. While theoretical foundations for the methods taught will be included, this is a performance/practice-oriented course. This course will build upon the concepts and skills developed in Public Speaking, as well as provide practical experience. Through feedback from the instructor and your classmates, you will gain insight into the tactics that work for and against you as a speaker. Speaking opportunities will include: Podcasting, Ted Talks, Vlogging, using technology when presenting. In addition, students will have the opportunity to watch and listen to professional speakers.

one nine week course**prerequisite: Public Speaking****elective****grades: 9, 10, 11, 12**

AP Literature & Composition (Course #173_01)**1.00 credit**

AP Literature and Composition is a literature driven writing intensive course designed to both meet the curricular requirements detailed in the AP English Literature and Composition course description and prepare students for the AP English Literature & Composition test. Literature: Students will read, respond to, analyze, interpret, and evaluate works of American, British, and Continental literature from the Anglo-Saxon Period to the present, using a variety of critical approaches, all based on a close reading of the text. Our primary approach will be formal, considering ways literary structures, elements, and techniques work to convey themes. We will also consider literature in its social and historical context by considering ways it reflects the human experience within a larger process of change. Contemporary literature criticism and nonfiction works will also be included as part of the course. Writing: Students will keep an informal, exploratory reading journal, which traces key themes and ideas as the course unfolds. We will also frequently write timed, in class explications similar to the free response items on the AP exam. Students will also complete two longer, more comprehensive essays: a critical explication of a work of literature which synthesizes original insight and interpretations found researching published criticisms; also a comparative evaluation of two works, targeting specific aesthetic or rhetorical criteria. Core Skills: The course also includes an ongoing vocabulary program, a review of traditional grammar and usage, and revision and editing activities addressing style, tone, and rhetorical issues in the development of student essays.

one semester course

prerequisite: English 11 Accelerated and proficient or advanced score on PSSA/Keystone. Students moving up from English 11 Advanced must Ademic must have earned an “A” or “B” in the course.

Creative Writing (Course # 169)**.50 credit**

This course is an introduction to creative writing. Students will be given the opportunity to experiment with a variety of forms, understanding that the creativity lies as much in the arrangement of the words, sentences, and paragraphs, as it does in the metaphors, the details, and the descriptions that they bring to the page. There will also be a strong focus on revision. Throughout the class, students will revise and polish works in preparation for a final portfolio. Assessment will be based primarily upon this final portfolio, though the students will also complete exercises and analyses throughout the course.

one nine week course**elective****prerequisite: none****grades: 9, 10, 11, 12**

English 9 Basic (Course #103)**1.00 credit**

English 9 Basic is an on-level study of literature (short stories, the novel, nonfiction, and poetry); vocabulary, grammar, speech, and composition. A study of *The Tragedy of Romeo and Juliet* and the novels *A Day No Pigs Would Die*, *The Car*, *Secret Life of Bees* and *The Autobiography of Miss Jane Pittman* are included. Major emphasis is placed on the development of reading comprehension, vocabulary building and sentence/paragraph writing.

one semester course**required****prerequisite: none****English 9 Academic (Course #102)****1.00 credit**

English 9 Academic is an intensive study of grammar, paragraph and essay development, short stories, novels, drama, nonfiction, vocabulary, and study skills. Major emphasis is placed on the development of reading skills. Reading List (in addition to an anthology) may include: *The Car*, *The Tragedy of Romeo and Juliet*, *The Odyssey*, *To Kill a Mockingbird*, *I am Malala*, *The Secret Life of Bees*.

one semester course**required****prerequisite: none****English 9 Advanced (Course #101)****1.00 credit**

This course is a more intensive study of grammar, essay development, annotation and analysis of short stories, novels, drama. Comprehension of nonfiction texts is required. Students will also study, vocabulary, and present performance tasks. Mastery of the parts of speech, mechanics of writing and paragraph writing is expected at this level. Composition will be in the informative, reflective, and persuasive modes. The student will also gain skill in research. The advanced course is designed to develop the skills necessary for college. Reading List: *The Tragedy of Romeo and Juliet*, *The Secret Life of Bees*, *To Kill a Mockingbird*, *Born a Crime*, *Educated*, and *I am Malala*. Writing Tasks: literary analysis essay, reflective writing, summaries of nonfiction texts, and annotated bibliography.

one semester course**required****prerequisite: none**

English 9 Accelerated (Course #100)**1.00 credit**

English 9 Accelerated is a rigorous course designed to introduce students to literary analysis. The student will be challenged to develop skills to read, analyze and interpret a variety of literary selections from different genre. Composition study will focus on writing in a variety of discourses: narrative, informational, and persuasive. Students will also be required to write an annotated bibliography and a research paper. This course will continue student's progress in the study of grammar, usage & vocabulary. The accelerated class is designed to prepare students for advanced placement testing in their senior year. Reading List (in addition to an anthology) may include: *The Autobiography of Miss Jane Pittman*, *The Secret Life of Bees*, *The Tragedy of Romeo and Juliet*, *I Am Malala*, Narrative in the *Life of Frederick Douglass*, *To Kill a Mockingbird*, and *The Odyssey*.

one semester course**required****prerequisite: none****English 10 Academic (Course #112)****1.00 credit**

English 10 Academic is a more intense study of grammar, short stories, drama, the novel, poetry, vocabulary, and writing. The course is designed to teach communication skills for students going immediately to the workplace or a one-two year technical training program following graduation. Reading List: (in addition to an anthology) *Bless the Beast and the Children*, *Julius Caesar*, and independent selections

one semester course**required****prerequisite: English 9****English 10 Advanced (Course #111)****1.00 credit**

English 10 Advanced allows a student to further develop writing, research and literature skills. Students explore world literature in thematic units. The purpose of the class is to build the students' abilities to identify the themes and other literary devices used in poetry, dramas, short stories, and novels and to apply these skills in their own writing assignments and speeches. Students will also write a content-related research paper. The Advanced courses are designed to develop the skills necessary for college. Reading List: *Lord of the Flies*, *Technopoly*, *MacBeth*, and two additional novels from a reading list.

one semester course**required****prerequisite: English 9**

English 10 Accelerated (Course #110)**1.00 credit**

English 10 Accelerated is a rigorous study of major world authors and thinking and writing skills. Its purpose is to build students' ability to identify the themes of dramas, short stories, essays, and novels to develop logically their own themes in writing assignments and speeches. Students will also write a literary research paper. Accelerated classes are designed to prepare students for Advanced Placement testing in their senior year. Reading List: *Hamlet*, *Oedipus Rex*, and four additional novels or plays from an outside reading list. Students will exhibit the strength of their outside reading skills in four oral exams administered outside of class.

one semester course**required****prerequisite: English 9****English 11 Academic (Course #122)****1.00 credit**

English 11 Academic traces the development of American literature from the colonial period to the present. The students will examine the values, conflicts, and ideas within the literature that are uniquely American, and through this examination, discover that American literature is often a reflection of its political and historical geographic climate. The class will have a strong focus on writing. Students will create focused compositions that include specific, substantial, and sophisticated content. At times, they will be asked to apply ideas from the literature to their own lives. Students will also demonstrate an understanding of purpose and audience and adjust their style accordingly. Ultimately, the course is designed to develop critical thinking skills necessary for technical school, college, or the workplace. In addition to readings from the anthology, students will read contemporary nonfiction selections, as well as at least three of the following works: *The Crucible*, *The Old Man and the Sea*, *Of Mice and Men*, and *The Five People You Meet in Heaven*.

one semester course**required****prerequisite: English 10****English 11 Advanced (Course #121)****1.00 credit**

English 11 Advanced provides a program designed to give the student college preparatory instruction. It gives the student a survey of American literature, analytical composition exposure, and appropriate vocabulary building. It relies on analytical thinking strategies and emphasizes themes unique to American literature. In addition to the fictional texts, students will also be exposed to appropriate and significant non-fiction historical texts. The Advanced courses are designed to develop writing and research skills necessary for college. Reading List: *The Scarlet Letter*, *The Crucible*, *Walden*, *The Great Gatsby*, *The Catcher in the Rye*, *Tuesdays with Morrie*, *The Five People You Meet in Heaven*, *The Red Badge of Courage*, and *The Adventures of Huck Finn*.

one semester course**required****prerequisite: English 10**

English 11 Accelerated (Course #120)**1.00 credit**

English 11 Accelerated traces the development of American literature from the colonial period to the present. In this class, students will examine the values, conflicts, and ideas within the literature that are uniquely American. They will recognize that American literature mirrors its political and historical climate, and they will recognize literature's influence on social and cultural parameters. The class will have a strong focus on writing. Students will be asked to form insightful discussions following preliminary reading, and they will be required to support their views with specific and substantial content. At times, they will also be asked to apply ideas from the literature to their own lives. Throughout the semester, students will complete a number of formal compositions that require them to show an understanding of purpose and audience and adjust their style accordingly. Accelerated English classes are designed to prepare students for college, post-graduate work, and in the more immediate future, Advanced Placement testing in their senior year. In addition to readings from the anthology, students will read contemporary nonfiction selections, as well as at least five of the following works: *The Crucible*, *Walden*, *The Adventures of Huckleberry Finn*, *Their Eyes Were Watching God*, *Of Mice and Men*, *The Great Gatsby*, and *The Catcher in the Rye*.

one semester course**required****prerequisite: English 10****English 12 Academic (Course # 132)****1.00 credit**

English 12 Academic is a course through which students will continue to develop reading skills and expand vocabulary skills. The course will include British Literature from the Anglo-Saxon period through the 20th Century. Expository writing skills will be reinforced and grammar usage will be integrated with the composition units. Reading List: *Macbeth*, *Beowulf*, *The Canterbury Tales*, and *Gulliver's Travels*.

one semester course**required****prerequisite: English 11****English 12 Advanced (Course #131)****1.00 credit**

English 12 Advanced is a literature driven, writing intensive course designed to both familiarize students with the central themes at work in the development of British literature and prepare students for the demands of academic writing. The course requires that students complete daily reading assignments. Students will also frequently be called upon to write about the literature they read--both formally in essays and informally in journals. Finally, students will be given the opportunity to study the structure of the language as we conduct a review of traditional grammar. Students will read representative works from the major literary periods which may include but are not limited to *Beowulf*, *The Canterbury Tales*, *Macbeth*, *Gulliver's Travels*, *Heart of Darkness*, and *A Portrait of the Artist as a Young Man*. The course also includes selections of contemporary nonfiction and literary criticism.

one semester course**required****prerequisite: English 11 Advanced & proficient or advanced score on PSSA/****Keystone. Students moving up from English 11 Academic must have earned an "A" or "B" in the course.**

Graphic Novel (Course #175)

.50 credits

This course is an introduction to graphic novels. A central focus will be how images and text combine to tell a story and make meaning. After beginning with short-form strip comics, study will shift to action-adventure and superhero comics. Following that, students will read and learn about “alternative” and “underground” comix (with an x) which have evolved into the modern long-form graphic novels of today. Students will learn the terms associated with the genre. Students will consider graphic novels as literature, analyze formal structure as it relates to content, and trace the development of various themes. Central questions will include the following: What works of literary culture offer significant insight to a broader sense of culture? What is considered literary and what is not? Most importantly, what makes a graphic novel canon? While this course has no final, assessments will be through Socratic Seminars, student-led presentations and shorter forms of writing such as a reviews of the strengths and weaknesses of a particular work. While a small bit of drawing or layout may be expected, this course focuses on reading and analyzing pre-existing texts, not designing one.

Some possible graphic novel texts studied include: The March, Maus: A Survivor’s Tale, Persepolis: The Story of a Childhood, American Born Chinese, Lindbergh Child, Special Exits, Stitches, and Batman: The Dark Knight Returns.

one nine-week course

prerequisite: none

elective

grades: 9, 10, 11, 12

Literature and Film (Course # 136)

.50 credit

This elective course examines a variety of topics in both film and literary studies. In teaching both literary and filmmaking techniques, this course will use a variety of carefully chosen films as a medium for understanding the relationship between film and literature. Students will study the language of film and will focus on artistic techniques, such as the use of lighting, camera angles, music, sound, and editing in order to better evaluate a film’s success. Students will read a variety of texts and examine their on-screen equivalents. Students will exercise critical viewing and reading skills in determining the success of adaptations and present their assessments through a variety of mediums including presentations and essays. Students will submit film reviews based on techniques and devices studied and interpreted. All language arts academic standards will be met in this course with a heavy emphasis on persuasive writing. Students are cautioned that this course requires extensive reading and writing in addition to viewing films and taking part in class discussions.

one nine week course

prerequisite: none

elective

grades: 9, 10, 11, 12

Public Speaking (Course # 167)

.50 credit

In this course, the student will develop skills in public speaking, debate, interpersonal communication, and oral interpretation. Students will develop their diction, volume, organization, and style. Each student will deliver a variety of speeches including, informative, persuasive, and oral interpretation.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

SAT Prep Class (Course #180)

.50 credit

This course is designed for juniors and seniors planning to take the Scholastic Aptitude Test (SAT) at the conclusion of the class. Students will learn test taking strategies and will receive review in the reading, writing and math portions of the test. A \$35 course fee is required for materials which the student will keep. Fee can be waived for demonstrated financial need.

one nine week course

elective

prerequisite: 2 credits completed in Math & English grades: 11, 12

Yearbook (course # 165)

1.00 credit

Yearbook is an in-depth study of all the skills needed to produce a professional journalistic-style publication. Strong emphasis is placed on writing copy, photo captions and headlines. Page design, layout, photo cropping, scheduling and financing are explored, mastered and applied to the production of the Emperor, the General McLane High School Yearbook. Because time demands exceed the classroom hours allotted, interested students should contact the teacher for schedule details. Evaluation is based on copy submissions, page designs, participation in advertising and book sales campaigns, and the ability to meet deadlines.

one semester course

elective

prerequisite: A or B in last completed

grades: 10, 11, 12

English course, preferably the advanced or accelerated levels



Family Living

Child Development I (Course #680)

.50 credit

This course introduces students to the subject of child development and helps them appreciate its relevance to their lives. While introducing students to the importance of studying children's physical, intellectual, social and emotional growth, this course will also explore ways caretakers can foster or hinder development. Students will be able to explore the many challenges of teen parenthood.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Child Development II (Course #681)

.50 credit

Child Development II continues to peak your interest in the amazing growth stages and challenges of young children. While learning to encourage and engage children in physical, intellectual, social and emotional growth; this course will also explore child play, singing, reading and nutrition. Exploring career options that focus on the knowledge of Child Development is a necessary component for those interested in most any career opportunity.

one nine week course

elective

prerequisite: Child Development I

grades: 10, 11, 12

Culinary Arts I (Course #640)

.50 credit

Culinary Arts I is a course designed to introduce students to simple cooking skills while learning information such as: reading a recipe, proper measuring techniques, conversions and sanitation while in the kitchen.

Lab fee \$20.00

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Culinary Arts II (Course #641)

.50 credit

Culinary Arts II is designed to encourage students to demonstrate knowledge of food preparation and team building skills as well as being able to work independently. Students will prepare numerous dishes while following a meal progression from salads to desserts. In addition students will discover new facts about nutrition labels, discuss cultural influences on food and careers in the food and culinary industry.

Lab fee \$20.00

one nine week course

prerequisite: Intro to Culinary Arts

elective

grades: 10, 11, 12

Fun Foods (Course #693)

.50 credit

Fun Foods is designed with the beginner in mind. Students will have a hands on approach to learning about food preparation, reading and understanding simple recipes as well as various simple food preparation techniques. The course is based on ready made and box mix products.

Lab fee \$20.00

one nine week course

prerequisite: none

elective

grades: 9, 10, 11, 12

GM Cafe (Course # 694)

.50 credit

This course will give students the experience of working within a coffee shop atmosphere. During the course students will learn such roles as barista, food prep and cashier which will encourage the essential understanding of the workings of a successful cafe.

one nine week course

prerequisite: none

elective

grades: 9, 10, 11, 12

The Lancer Pantry (Course #692)

.50 credit

Lancer Pantry is a course offered during the holiday season to encourages students to creatively express themselves through baking. This Foods class is designed to encourage students to further develop their Baking and Pastry Art Skills. As with all food laboratory classes, Lancer Pantry will develop team building skills as well as being able to work independently. Students will develop a strong background and understanding of the Culinary Arts Trade which will empower them to make career choices.

Lab fee \$20.00

one nine week course

elective

grades: 10, 11, 12

Senior Seminar (Course #156)

.50 credit

Senior Seminar is designed to offer the graduating senior a final opportunity to learn about subjects that all graduates should know. This course stresses team building, allows seniors to generate topics in which they want to learn more, answers questions to which all seniors should know the answers, explores relationships and their impact on society, and practices simple skills that will be used repeatedly in a student's lifetime. The course is not required of seniors but is highly recommended.

one nine week course

prerequisite: none

elective

grade: 12



Health & Physical Education

Adaptive PE (Course # 831)

.50 credit

This course is designed to give the adaptive students a complete physical fitness experience.

Teachers work in conjunction with other support staff to facilitate the needs of each individual student.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Extreme Fitness Grade 12 (Course #812)

.50 credit

Extreme fitness is an unique opportunity for Seniors to fulfill their Physical Education credit with a consistent, challenging workout. This class is for anyone interested in a 5 day a week program to maintain or improve their fitness level. Classes will consist of workouts from popular videos including, but not limited to, Insanity, P90X, The 21 Day Challenge, and The Asylum. Be prepared to set a fitness goal and then blow it away.

one nine week course

course meets PE-12 requirement

prerequisite: none

Fitness and Weight Training I (Course # 836)

.50 credit

This course is designed for students to develop and implement a lifetime personal fitness plan incorporating both aerobic and anaerobic elements. Students will gain an in depth knowledge of weight training techniques and exercise physiology. Not recommended for athletes in-season.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Health 9 (Course #800)

.50 credit

This course meets in two nine-week sessions, in conjunction with Course #799. One session will be spent on standard first aid, personal safety and CPR. The 2nd session involves the investigation, responsibility and control of the students' behavior in drugs, mental health & human growth & development.

two nine week courses

required

prerequisite: none

Health 11 (Course # 821)

.50 credit

This course meets every other day for two nine-week periods. Topics include physical fitness, nutrition, wellness, death & dying, substance abuse, sexuality and other current health issues.

two nine week courses

required

prerequisite: none

Lifetime Sports (Course #825)

.50 credit

Lifetime Sports is a Physical Education class that focuses on individual and small team sports that can be performed at any age. The objective of this course is to teach the rules and skills of each activity so students will have the opportunity to remain physically active throughout the rest of their lives.

In this course, students will be introduced to, and will learn the basics of, Tennis, Pickleball, Disc Golf, Badminton and Nitroball among other seasonal activities.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Physical Education Grade 9 (Course #799)

.50 credit

This course meets in two nine-week sessions, in conjunction with Course #800. The emphasis is on physical fitness and team sports taught through a developmental approach with the following activities: basketball, football, soccer, softball, volleyball, weight room activities, recreational games, tumbling, team handball, and physical fitness testing.

two nine week courses

required

prerequisite: none

Physical Education – Grade 10/Drivers Ed (Course # 810)

.50 credit

Classroom driver's education affords the students an instructional background for driving a car. This course is taken in conjunction with PE 10. The PE 10 course meets for 4 1/2 weeks and the emphasis is on physical fitness and the team sports offered in PE9. There is also more emphasis on character education, team cohesiveness and cooperative games

one nine week course

required

prerequisite: none

Physical Education Grade 11 (Course # 820)

.50 credit

This course meets every other day for two nine-week terms. The emphasis of this course is on physical fitness and refinement of team cooperation and lifetime activities taught through individual sports. Activities include archery, aerobics, basketball, golf, self defense, soccer, softball, tennis, volleyball, speedball, ultimate Frisbee, and ultimate football.

two nine week courses

required

prerequisite: none

Physical Education Grade 12 (Course # 830)

.50 credit

This course meets every day for one nine weeks. The emphasis of this course is on refinement of team cooperation and lifetime activities taught through individual and recreational sports. Activities include archery, aerobics, basketball, golf, self defense, soccer, softball, tennis, volleyball, team handball, Frisbee, bowling, football, and badminton.

one nine week course

required

prerequisite: none

Team Sports (Course #811)

.50 credit

This course is designed to complement and extend the physical education curriculum delivered in the ninth & tenth grade courses. Students will develop an appreciation for the strategies, training & conditioning which is a part of American team sports. Students will be actively involved in applying these strategies.

one nine week course

elective

prerequisite: none

grades: 9, 10



Mathematics

****Our mathematics classes use the TI 84 graphing calculators. If you choose to purchase your own, please purchase one of these models.****

MATH SEQUENCE:

Students may progress through levels of math courses downward sequentially or laterally. Any lateral movement should be with permission of the instructor. Students may not move backwards by level. Students must pass a course in one level before progressing to the next.

Advanced Algebra/Trig ACC (Course #320) Level 3 1.00 credit

Advanced Algebra/Trigonometry is a course that builds on the skills learned in Accelerated Algebra 1, Accelerated Algebra 2 and Accelerated Geometry. It is a fast paced and academically demanding course dealing with topics such as linear functions, quadratic functions, exponential functions, logarithmic functions, rational expressions and functions, radicals, sequences, series and the trigonometric functions and their inverse functions. This is a rigorous course designed to provide students with prerequisite skills as needed for the successful completion of calculus higher-level math courses.

one semester course

prerequisite: successful completion of Geometry ACC and teacher rec.

Algebra I (Course #301) Level 1 1.00 credit

Algebra I is a one-semester, one-credit course designed as a beginning study of Algebra. The course covers real numbers, variables, linear equations and inequalities, linear systems, exponents, functions, factoring, and data analysis. Emphasis is placed on real-life problem solving strategies and graphing.

one semester course

prerequisite: successful completion of Pre-Algebra (70% or better)

Algebra II (Course # 311) Level 3 1.00 credit

Algebra II is a one semester, one credit course for students who have successfully completed Algebra I and Algebra II. The course covers functions (linear, quadratic, polynomial, rational, exponential, and logarithmic) and graphing, analysis, and matrix operations utilizing hands-on experiments, technology, creating mathematical models for real world applications and team explorations. The course is designed to introduce students to the topics needed for successful work in Geometry.

one semester course

prerequisite: successful completion of Algebra I

Algebra II Accelerated (Course # 300) Level 1

1.00 credit

Algebra II Accelerated is a one-semester course dealing with the theory of algebra. This is a rigorous course designed to provide students with the prerequisite skills needed for the successful completion of higher level math courses. The main topics include linear systems and matrices, polynomial, exponential and rational functions and equations, a data analysis, and probability.

one semester course

prerequisite: successful completion of Algebra I, recommendation of the school

AP Calculus AB (Course #334_01) Level 5

1.00 credit

AP Calculus AB is a weighted, advanced placement, elective course covering the calculus of a single variable. This course has been audited and approved by the College Board as an advanced placement course and its curriculum is recognized by colleges and universities. The content covers the same content as first level college calculus classes. Numerical, graphical, analytical and verbal representations will be used to present the concepts of differential and integral calculus including rates of change, limits, derivatives and their applications, antiderivatives, techniques of integration and applications of definite integrals. Computers and graphing calculators will be utilized. The syllabus of the course satisfies the College Board's requirements for Advanced Placement Calculus AB. A Texas Instruments TI-84 Graphing calculator is required for this course.

One-semester course (Elective)

Prerequisites: successful completion of Adv. Algebra/Trigonometry Acc or completion of Trigonometry/Precalculus with 80% or better recommended.

AP Calculus II BC (Course #334_02) Level 6

1.00 credit

AP Calculus II BC is an advanced placement, one-credit weighted elective course designed to allow students to explore topics typically covered in second or third level college calculus classes. This course has been audited and approved by the College Board as an advanced placement course and its curriculum is recognized by colleges and universities. The course covers differential equations, hyperbolic functions, advanced techniques of integration, infinite series, complex implicit relations and their applications, parametric functions, and polar equations. Applications of calculus to other disciplines will be explored. The syllabus of this course will follow the outline of topics provided by the college board for AP Calculus BC. Students will also be provided the opportunity to prepare for the AP Calculus exam if they elect to take the exam. A Texas Instruments TI-84. Graphing calculator is required for this course.

One-semester course (Selective)

Prerequisite: successful completion of AP Calculus AB and the permission of the instructor.

Applied Algebra Part I (Course # 351) Level 1

1.00 credit

Applied Algebra Part I is a one-semester, one-credit course designed as a beginning study of Algebra. The course covers operations with real numbers, solving and graphing, linear equations, statistics and probability. Emphasis is placed on strengthening basic skills, real life problem-solving strategies and graphing.

one semester course

Applied Algebra Part II (Course # 352) Level 2

1.00 credit

Applied Algebra Part II is a one-semester, one-credit course designed as a continuation of Applied Algebra Part I. The course covers linear equations and inequalities, linear systems, functions, factoring, probability, and coordinate geometry. Emphasis is placed on real-life problem solving strategies and graphing.

one semester course

prerequisite: successful completion of Applied Algebra Part I and/or teacher recommendation

Applied Algebra Part III (Course#)

1.00 credit

Applied Algebra Part III is a one-semester, one-credit course designed as a continuation of Applied Algebra Part II. The course covers applications of geometry, quadratic functions, and exponential growth and decay. Emphasis is placed on real-life problem solving strategies and graphing.

one-semester course

prerequisite: successful completion of Applied Algebra Parts I and II

Coding I (Course #360)

.50 credit

By solving puzzles in a dynamic 3D puzzle world, students will develop a set of coding skills to build up their basic programming vocabulary. Their coding journey begins with simple commands, functions, and loops. From the start, they will write real Swift code-the same code used by real programmers. Then students will build on their fundamental knowledge of Swift. They will journey beyond simply solving puzzles and create worlds of their own. They will learn about variables and types, the coding constructs that allow them to store and access information. These new skills, along with initialization and parameters, will give them even more ways to use code to interact with their characters and the puzzle world, allow them to change the rules of the world itself.

one nine week course

elective

prerequisite: none

Coding II (Course #361)

.50 credit

Coding II is a nine-week course where students will expand their coding skills to start thinking more like an app developer. Students will build a set of creative tools as they explore powerful coding concepts that professional developers use. They will learn about graphics and coordinates, they'll be able to manipulate images, and they'll combine these techniques with touch events to paint artistic shapes in space. Students will explore event handlers using real events, such as finger movements or taps, to trigger their code.

one nine week course

elective

prerequisite: Coding I

AP Computer Science Principles with Swift

1.00 credit

AP Computer Science Principles with Swift is a semester course designed to introduce new and experienced programmers all aspects of app development while helping prepare the for the AP Computer Science Principles exam. Students explore how apps affect our society, our economy, and our culture. They also build a solid foundation in programming fundamentals using Swift as the language. Throughout the course, students get practical experience with the tools, techniques, and concepts needed to build a basic iOS app. Lessons take them through the process of designing an app that includes brainstorming, planning, prototyping, and evaluating apps of their own. And they learn user interface design principles-essential to programming and making great apps.

one semester course

elective

prerequisite: none

App Development with Swift

.50 credit

App development with Swift is a nine-week course designed to teach specific skills related to either Swift or app development. Students complete guided projects that include a description of user-centered features, a project plan and instructions for designing and building a fully functioning app. Through these projects, students can create features that interest them, all while performing the type of work they can expect in an app development workplace.

one nine week course

elective

prerequisite: none

Geometry (Course #321) Level 3

1.00 credit

Geometry is a one-semester, one-credit course for students who have successfully completed Algebra II or Applied Algebra Parts I, II and III. The course presents geometry by using a guided-discovery approach, whereby students work with the tools of geometry and discover geometric properties by experimentation and observation. Real world application, technology, mathematical models and team explorations are utilized. This course is designed to introduce students to the topics needed for successful work in Trigonometry and Pre-calculus.

one semester course

prerequisite: successful completion of Algebra II or Applied Algebra I, II, and III

Geometry Accelerated (Course # 310) Level 2

1.00 credit

Geometry Accelerated is one-semester, one-credit course for students who have successfully completed Algebra II accelerated. The course is rigorous and covers all topics of traditional plane geometry and many topics of solid geometry. Students are expected to know and apply previously learned Algebra skills in a geometric setting. Logic and problem solving is emphasized through content knowledge, formal and informal proof, utilizing manipulatives and application problems.

one semester course

prerequisite: successful completion of Algebra II Accelerated

Math K-NEXtions (Course # 336)

.50 credit

This course is a 9-week math elective class. It will use a hands on approach to discovering engineering and mathematical concepts. Students will work on projects together in teams: brainstorming, designing, building, testing, analyzing, and rebuilding. Many projects will use K-NEX pieces to construct however other everyday objects will be used also. There will be an overarching theme of STEM (Science, Technology, Engineering, Mathematics) each project uses. Teamwork and communication are two soft skills this course will focus on.

one nine week course

elective

Pre-calculus (Course #332) Level 4

.50 credit

Pre-calculus is a half-credit, nine-week, college-preparatory course for juniors and seniors who have successfully completed Algebra 1, Algebra 2, Geometry, and Trigonometry. The course covers the graphing, analysis, and application of functions, rates of change, growth and decay, series and other advanced topics. The course is designed to introduce students to the topics and techniques needed for successful work in calculus and advanced mathematics. A Texas Instruments T1-84 graphing calculator is used for this course.

one nine weeks course

prerequisites: successful completion of Algebra I & II, Geometry, and Trigonometry

Trigonometry (Course #331) Level 4

.50 credit

Trigonometry is a half-credit, nine-week, college preparatory course for students who have successfully completed Algebra 1, Algebra 2, and Geometry. The course presents analytical and applied trigonometry and its applications to fields such as architecture, surveying, astronomy, periodic motion and natural phenomena. The content is designed to prepare college-bound students for future mathematical experiences in science, medicine, social and behavioral sciences, engineering, and technical fields. A Texas Instruments T1-84 graphing calculator is used for this course.

one nine week course

prerequisites: successful completion of Algebra I, Algebra II, and Geometry



Instrumental Music

Brass Ensemble (Course # 722)

.50 credit

This course will allow the student to work on a solo for his/her instrument as well as perform in a small group. Students may choose to learn a second instrument. Performance may be required. Combinations of brass instruments will be explored.

one nine week course

elective

prerequisite: ability to play a brass instrument

grades: 9, 10, 11, 12

Concert Band 9/10 (Course #726)

.50 credit

Emphasis is placed on the development of basic skills.

one nine week course

elective

prerequisite: ability to play band instrument;

grade: 9, 10

enrollment in Marching Band in 9th grade

GM Jazz 9/10 (Course # 724)

.50 credit

This band will perform big band jazz music on an intermediate level of difficulty. Performances may be required of all members including festivals, concerts and community events.

one nine week course

elective

prerequisites: audition and enrollment in

grades: 9, 10

Concert Band or Symphonic Wind Ensemble and/or instructor permission.

GM Jazz Big Band (Course # 725)

1.00 credit

Some sessions on jazz history and improvisation will be held. The band participates in competitions and numerous performances throughout the semester. Instructor may permit students based upon ability level.

one semester course

elective

prerequisite: audition and enrollment in

grades: 10, 11, 12

Concert Band or Symphonic Wind Ensemble and/or permission of the instructor.

Priority will be given to students participating in Marching Band and Concert Band/or Symphonic Wind Ensemble.

Guitar Ensemble (Course # 738)

.50 credit

This course will allow the student to work on a solo for his/her instrument as well as perform in a small group. Students may choose to learn a second instrument. Performance may be required. Combinations of string instruments will be explored.

one nine week course

elective

prerequisite: ability to play a stringed instrument

grades: 9, 10, 11, 12

History of Jazz (Course # 723)

.50 credit

This course will explore the History of Jazz from its origin in Africa and the South, through the present and into the future. It will look at key persons, places and events and how they relate to other events in our country during this century. Recordings as well as live performances will be incorporated into the course format whenever possible.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

History of Rock n' Roll (Course # 732)

.50 credit

This course will explore the history of rock and roll from its origin through the present and into the future. It will look at the influence of American music, including jazz as well as key persons, places and events and how they relate to other events in our country during the 20th century and the present. Recordings, DVD's (and when possible) live performances will be incorporated into this course.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Holiday Symphonic Winds (Course #701_1)

.50 credit

This instrumental ensemble meets during the second term for holiday concerts and gatherings. Students will perform traditional and modern holiday music as part of their Holiday Symphonic Winds experience.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Jazz Improvisation I (Course # 718)

.50 credit

This course will teach basic jazz improvisation and music theory and harmony as it relates to jazz performances. The lab will be used to support solos that the student will create. Where possible, combo experiences will be provided for the student.

one nine week course

elective

prerequisite: instructor approval

grades: 9, 10, 11, 12

Jazz Improvisation II (Course # 719)

.50 credit

This course will teach advanced jazz improvisation and music theory and harmony as it relates to jazz performances. The lab will be used to support solos that the student will create. Where possible, combo experiences will be provided for the student. Arranging techniques for the jazz medium will also be explored and compositions studied.

one nine week course

elective

prerequisite: instructor approval

grades: 9, 10, 11, 12

Marching Band (Course #700)

.50 credit

The Marching Band performs at all football games, parades and competitions. Marching band members must be a member of a concert band to participate. Questions should be referred to the band director.

one nine weeks course

elective

prerequisite: ability to play an instrument;

grades: 9, 10, 11, 12

audition required for visual unit

Percussion Ensemble (Course # 720)

.50 credit

This course will allow the student to work on a solo for his/her instrument as well as perform in a small group. Students may chose to learn a second instrument. Performance may be required. All percussion instruments will be taught.

one nine week course

elective

prerequisite: ability to play a percussion instrument

grades: 9, 10, 11, 12

Spring Symphonic Winds (Course #701_2)

.50 credit

Participants in the Spring Symphonic Winds will be exposed to proper performance techniques and will perform music from different musical periods. Students will participate in the Spring Symphonic Winds concert.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Student Conductor (Course # 703)

.50 credit

This course will teach the fundamentals of conducting, leadership skills and section rehearsal techniques. Students will be assigned to the eighth or ninth grade band for practical experience.

one nine week course

elective

prerequisite: instructor's permission

grades: 10, 11, 12

Woodwind Ensemble (Course # 721)

.50 credit

This course will allow the student to work on a solo for his/her instrument as well as perform in a small group. Students may chose to learn a second instrument. Performance may be required. Combinations of woodwind instruments will be explored.

one nine week course

elective

prerequisite: ability to play a woodwind instrument

grades: 9, 10, 11, 12



Science

- Anatomy, Energy and You, Nuclear Physics, Astrophysics (Upon completion of these courses students will receive elective credits, NOT science credits)
- Students may be placed into an alternative course sequence by science department recommendation only.
- Course sequences are designed specifically to prepare ‘Academic and Advanced’ students to take the Biology Keystone Exam after completion of Biology II and ‘Accelerated’ students to take the exam after Biology I Accelerated.
- Failing any course in the accelerated sequence will result in the student’s placement in the advanced sequence.
- Students will progress through levels of Science. Lateral movement can be done with the advisement of the science department.

Anatomy (Course #450)

1.00 credit

This course was developed to introduce basic human anatomy and physiology. Students planning a career in any health related field should be encouraged to take this class. The basic scope and sequence of the course will cover the following bodily systems: skeletal, muscular, cardiovascular, and nervous. Each unit will include lab explorations like monitoring blood pressure, sensory labs, dissection of the sheep brain, sheep heart, cow eye, and bullfrog’s muscular system. All material covered in this class is unique to the course and is not covered in any other science class offered at GM.

one semester course

elective

prerequisite: Successful completion of

grades: 11, 12

Biology I Acc or Biology I and Biology II and Chemistry I Acc or Intro to Physics and Intro to Chemistry

AP Biology (Course # 429_01)

1.00 credit

AP Biology is a course designated for the accelerated, college bound students. The course builds on the concepts learned in Biology I and II with an emphasis on laboratory explorations. By structuring the course around the four big ideas, enduring understandings, and science practices students will develop an appreciation for the study of life. This course will help students identify and understand unifying principles within a diversified biological world. In addition, this course will facilitate critical thinking skills in the process of inquiry. At the end of the course, students will have an awareness of the integration of other sciences in the study of biology, understand how the species to which we belong is similar to, yet different from, other species, and be knowledgeable and responsible citizens in understanding biological issues that could potentially impact their lives.

one semester course

prerequisite: successful completion of Biology I Accelerated and Chemistry I Accelerated or Biology I, Biology II, and Chemistry I

AP Chemistry (Course # 420_01)**1.00 credit**

This course is an advanced chemistry course designed for those students who exhibit a desire and an ability to continue beyond the basic chemistry. It includes a review of major concepts from Chemistry I Accelerated and new topics in the area of nuclear reactions, rates of chemical reactions, various equilibrium types and electrochemistry. An introduction to organic chemistry is also included if time permits. Experimentation & mathematical analysis are emphasized. The syllabus of the course satisfies the College Board's requirements for AP Chemistry exam.

one semester course**prerequisite: A "B" average in Chemistry I & Algebra II****AP Environmental Science (Course #4011)****1.00 credit**

The AP Environmental Science course is a one-credit course designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural and human worlds. Students will identify and analyze environmental problems-both natural and human made-evaluate the relative risks associated with these problems, examine alternative solutions for resolving and/or preventing these problems, and -in the process-develop and focus their own individual perspectives on the issues facing our world now and in the future. Through interdisciplinary in nature, AP Environmental Science has several cross-cutting themes: science is a process, energy, conversions underlie all ecological processes, the Earth itself is one interconnected system, humans alter natural systems, environmental problems have a cultural and social context, human survival depends on developing practices that will achieve sustainable systems.

one semester course**prerequisite: completion of all Biology requirements(Bio I Acc or Bio I and Bio II) completion of a 1 credit Chemistry course (Chem I ACC or Chem I)****Applications of Science (Course # 464)****1.00 credit**

This 1 credit course will provide students with practical experiences in the science-related topics that are currently impacting our day-to-day lives outside the walls of this school the most. We will start with scientific principles as our foundation, then we will move into an array of topics ranging from the life sciences to the physical sciences that are flexible and based upon student interest.

one semester course**prerequisite: completion of Biology I & Biology II, and teacher/guidance recommendation.**

Astrophysics (Course #460)**.50 credit**

Astrophysics is a science course for students who desire to learn about phenomenon beyond the scope of the earth using minimal amount of mathematics. The topics that will be discussed are space flight, NASA, the solar system, black holes, UFO's, stars, comets, asteroids, galaxies, cosmology, and the universe. The course will be swayed by student interest and current events in astrophysics.

one nine week course**elective****prerequisite: None****grades: 10, 11, 12****Biology I (Course #413)****1.00 credit**

The purpose of this course is to help students develop the concepts necessary for understanding living organisms. Course topics are covered in a depth appropriate for the academic student. Topics include: characteristics of organisms and their levels of biological organization, life sustaining properties of water, biochemistry, principles of ecology, cell cycle, DNA replication, prokaryotic and eukaryotic cell structure, and cellular homeostasis.

one semester course**required****prerequisite: none****Biology I Accelerated (Course # 400)****1.00 credit**

The purpose of this course is to help students develop the concepts necessary for understanding living organisms. Course topics will be covered in a depth appropriate for the accelerated student. Upon completion of Biology I Accelerated, the student will take the Keystone Exam in Biology. All topics covered in Biology I and Biology II will be covered in this course including: characteristics of organisms and their levels of biological organization, life sustaining properties of water, mechanisms of evolution, principles of ecology, prokaryotic and eukaryotic cell structure (homeostasis, cell cycles) photosynthesis and cellular respiration, genetics, biochemistry, DNA replication, protein synthesis, and comparative anatomy through a series of dissections.

one semester course**required****prerequisite: recommendation by the middle school****Biology II (Course #423)****1.00 credit**

The purpose of this course is to help students develop the concepts necessary for understanding living organisms. Course topics are covered in a depth appropriate for the academic student. Upon completion of Biology I and II, the student will take the Keystone Exam in Biology. Topics include: photosynthesis and cellular respiration, genetics, mechanisms of evolution, protein synthesis, and comparative anatomy through a series of dissections.

one semester course**required****prerequisite: Biology I**

Chemistry I (Course # 421)**1.00 credit**

Chemistry is a physical science dealing with the structure and composition of matter, the changes matter undergoes, and the mechanisms by which these changes occur. The topics covered in this course include: bonding chemical formulas, composition and nomenclature, chemical reactions and equations, stoichiometry, solutions, and gas laws. There is a significant amount of mathematics used in Chemistry thus requiring an above average ability in mathematics.

one semester course**prerequisite: Biology I and Biology II, Intro to Chemistry, Intro to Physics and Algebra I or teacher recommendation.****Chemistry I Accelerated (Course #410)****1.00 credit**

Chemistry is a physical science dealing with the structure and composition of matter, the changes matter undergoes, and the mechanisms by which these changes occur. The topics covered in this course include: matter and its changes, scientific measurements, atomic structure, electron arrangement, the periodic table, bonding, chemical formulas, composition and nomenclature, chemical reactions, stoichiometry, solutions and gas laws. There is a significant amount of mathematics used in Chemistry thus requiring an above average ability in mathematics. Chemistry I Accelerated also places a large emphasis on high analytical skills.

one semester course**prerequisite: Biology I Acc or "B" average in Biology II and Algebra II Accelerated or B" average in Algebra II.****Drone I (Course #480)****.50 credit**

Drone I is a course designed to explore a variety of subjects as they relate to drones. This course will include elements of the following topics: Safety, Batteries Chargers and Connectors. Design and Documentation, Drone Overview and Flight Basics, Common Sense Flying, Fundamentals of Flight, FAA Regulations, Beginning Flight Skills, Transmitters and Receivers, Propellers, Drone Maintenance and Battery Care. While using a real toy drone a student will then learn the basic principles of aerodynamics.

one nine-week course**prerequisite: Intro to Physics or Physics 1 or Physics 1 Acc.****grades: 11, 12****Drone II (Course #481)****.50 credit**

Drone II is a course designed to explore a variety of subjects beyond the Drone I course as they relate to drones. This course will include elements of the following topics: Review of Flight Basics and Common-Sense Flying, Advanced Flight Skills, Electric Motors, Flight Controllers, Air Frames, Cameras and Gimbals, Efficiency versus Performance, Ground Control Stations and First-Person View. While using a real toy drone a student will then learn the basic principles of aerodynamics.

one nine-week course**prerequisite: Drone I****grades: 11, 12**

Intro to Chemistry (Course # 431)**.50 credit**

Intro to Chemistry will provide opportunities for students to develop and communicate an understanding of chemistry through lab-based activities, mathematical expressions, and concept exploration. Concepts covered in this course include: metric measurements, structure of matter, chemical and physical properties and changes, atomic structure, the periodic table, identifying and balancing chemical reactions. The use of technology (scientific equipment, calculators, computers, research, etc.) will be an integral part of this course. This course demands that students effectively communicate results through various methods (summarizing data in a specified lab format, written and/or oral presentations, graphs, charts, diagrams, multimedia presentations, etc.) This course will prepare students for higher-level science courses.

one nine week course**prerequisite: Biology I and Biology II, and Algebra I or Applied Algebra Part II****Intro to Physics (Course # 432)****.50 credit**

Intro to physics will provide opportunities for students to develop and communicate an understanding of physics through lab-based activities, mathematical expressions, and concept exploration. Basic principles such as force, rate, and resistance are applied to mechanical, fluid, electrical and thermal systems. A hands-on laboratory approach is emphasized. The use of technology (scientific equipment, calculators, etc.) will be an integral part of this course. This course demands that students effectively communicate results through various methods (summarizing data in a specified lab format, written and/or oral presentations, graphs, charts, diagrams, etc.). This course will prepare students for higher-level science courses.

one nine-week course**prerequisite: Biology I and II, and Algebra I or Applied Algebra Part II****Nuclear Physics (Course #462)****.50 credit**

The student will become familiar with nuclear reactions, quantum physics and atomic physics. The depth and scope of these topics will be steered by the student's interest level. The student will apply mathematical solutions to physical problems and expand his or her problem solving ability. The student will learn to communicate scientific data, results and conclusions, and to relate the concepts of physics to everyday phenomena.

one nine week course**prerequisite: Chemistry I Acc or Physics I****elective
grades: 11, 12**

Physics I (Course #433)**1.00 credit**

Physics is a science course that focuses on the study of matter and energy and their interactions. It provides a systematic understanding of the fundamental laws that govern physical, chemical, and biological processes. This Physics course is for students that desire to go beyond the introductory level and is designed to: instruct students in foundational physics concepts, prepare students to exist in an increasingly technological society, develop the students' analytical, problem solving, and laboratory skills and integrate math, science and technology.

one semester course**prerequisite: Biology I and Biology II, Intro to Chemistry, Intro to Physics and Algebra II or Equivalent****Physics I Accelerated (Course #440)****1.00 credit**

This course will provide the student with the opportunity to develop a basic understanding of the fundamental principles of physics. The course includes a thorough study of classical mechanics. A problem solving approach will be emphasized. Students will participate in a variety of classroom activities to develop confidence in their ability to understand and apply scientific concepts and principles.

one semester course**grades: 11/12****prerequisite: Algebra I and II, Geometry, Chemistry, Trig/Pre Calculus****Physics II Accelerated (Course # 441)****1.00 credit**

This course will provide the student with the opportunity to develop an advanced basic understanding of the fundamental principles of physics. The course includes a review of classical mechanics, circular motion and rotational dynamics. This course will also familiarize the student with topics of sound, light, optics, modern physics and a little magnetism. A problem solving approach will be emphasized as concepts of physics are related to everyday phenomena. Students will participate in a variety of classroom activities to develop confidence in their ability to understand and apply scientific concepts and principles. The depth and scope of these topics will be steered by the student's interest level. This course is recommended for students pursuing careers in medicine, engineering, and science fields.

one semester course**prerequisite: Physics I Acc.**



Social Studies

****Internet resources and interactive websites will be utilized whenever applicable for researching topics and issues that relate to the content being studied and discussed.****

AP US History (Course #231_01)

1.00 credit

The advanced placement U.S. history course is an elective course of study that will prepare students to take the advanced placement exam. Successful completion of this exam provides college credit to the colleges and universities that accept the advanced placement exam results. This course will expand upon the traditional curriculum to include an in-depth study of U.S. domestic and foreign affairs up to and including present-day.

one semester course

elective

prerequisite: US History I & US History II required

grades: 11, 12

Civics and Economics (Course #226)

1.00 credit

This course is the study of the theoretical and practical aspects of citizenship, its rights and duties; the duties of citizens to each other as members of a political body and to the government. The course will focus on the student's role of being a citizen. Students will examine the basic concepts of the American government. This will include its origins structure, and applications. Students will examine their role and responsibilities issues. Students will also examine their role and responsibility in making government responsive and effective. In the economic portion of the course, students will learn to apply the basic principals of economics to their daily lives as employees, employers, savers, investors, consumers, and citizens. These principles will include supply and demand, characteristics of a market economy, financial institutions, and the governments role in our economy. Special focus will be on personal finance planning, budgeting, consumerism, housing, and transportation. Geography and current events will incorporated in the course to provide applicable insight and relevance.

one nine week course

required

Current Affairs (Course #241)

.50 credit

The course is designed to analyze important current topics in the world.

one nine week course

elective

prerequisite: US History I & US History II

grades: 11, 12

European Cultural Studies (Course #549)

.50 credit

This course will focus on Western European culture. We will explore ancient civilizations, geography, history, current events, and cultural differences between Europe and the United States. This course will be primarily project and discussion based.

one nine week course

elective

prerequisite:

grades: 9, 10, 11, 12

Hero and Villains: Social Justice (Course #251)

.50 credit

This course is about trying to understand other cultures, beliefs and peoples' way of life. At the root of most violence and conflict in the world today there is one common thread: intolerance. Intolerance is the inability of one group to understand or accept the practices and beliefs of others, resulting in conflict and in some cases war. Our hope is that through this study we will have a better understanding of world and regional conflict, including discussion and analysis of possible solutions.

one nine week course

elective

prerequisites: none

grades: 11, 12

Psychology of Body and Mind (Course #243)

.50 credit

This course is designed to give students an overview of major topics in psychology with a focus on the relationship between physiological processes and mental processes. The goals include preparing students for an Introduction to Psychology course at the college level, providing students with a better understanding of how and why people think and behave the way they do, arming students with a better understanding of their own thoughts and behaviors, and instilling in students the ability to look at sensitive issues in the world of psychology and mental health with more sensitive eyes. The major topics covered include history of the discipline, the brain and nervous system, altered states of consciousness, perception, learning and conditioning, and memory and thought.

one nine week course

elective

grades: 11 & 12

prerequisite: Can be taken independent of Psychology of Development and Wellness

Psychology of Development and Wellness (Course #244)

.50 credit

This course is designed to give students an overview of major topics in psychology with a focus on the stages of development and mental health. The goals include preparing students for an Introduction to Psychology course at the college level, providing students with a better understanding of how and why people think and behave the way they do, arming students with a better understanding of their own thoughts and behaviors, and instilling in students the ability to look at sensitive issues in the world of psychology and mental health with more sensitive eyes. The major topics covered include history of the discipline, infancy and childhood, adolescence, adulthood and old age, personality, stress and health, psychological disorders, and therapy.

one nine week course

elective

grades: 11 & 12

prerequisite: Can be taken independent of Psychology of Body and Mind.

Sociology (Course #240)**.50 credit**

Sociology is an introductory course that focuses on social behavior in human groups. The primary objective will be to examine and identify patterns of behavior in terms of the roles that people have in specific groups. The students will focus on the elements of groups in culture, the family, race and ethnicity, education, and religion. They will attempt to apply sociological knowledge to existing social situations.

one nine week course**elective****prerequisite: none****grades: 10, 11, 12****US History I (Course # 212)****1.00 credit**

The topics covered in the ninth grade US History course will include: Mexican War, events leading up to the Civil War, Civil War, Reconstruction Era, Indian policies, railroads, steel, oil and automobile industries, industrialization in general, urbanism, Gilded Age, expansionism, U. S. emerging as a world power, Spanish American War, Progressive Era, Wilson years and WWI. There will also be an emphasis on geography and the comparing and contrasting of events that happened throughout the world at the same time periods.

one semester course**prerequisite: none****grade: 9****US History I Accelerated (Course # 214)****1.00 credit**

Content of this course is the same as course #212, but an emphasis will be placed on higher order thinking, critical thinking, and problem solving. Alternative assessments, such as drawings, narratives, debates, group presentations, short story construction, self and group evaluations, will be used with the standard assessment techniques to determine the student's grade. There will be a more demanding writing component as well.

one semester course**required****prerequisite: none****grade: 9****US History II (Course # 213)****1.00 credit**

The course pursues the study of modern US history and the relationship of our country to the larger world. The course begins after WWI in the year of 1920 and concludes by studying present day US as well as its relationship to Europe, Asia, Africa and Latin America. Emphasis will be placed on the Jazz Age, the Great Depression, the struggle of WW II, battling the Cold War and transformations within the United States and the World.

one semester course**required****prerequisite: US History I****grade: 10**

US History II Accelerated (Course # 215)

1.00 credit

Content of this is the same as course #214, but an emphasis will be placed on higher order thinking, critical thinking, visual learning and the use of primary source documents, as tools for finding our place in the global society of this time period. Alternative assessments, such as drawings, narratives, debates, group presentations, and short story construction.

one semester course

required

prerequisite: US History I

grade: 10

World War II and The Greatest Generation (Course # 216)

.50 credit

This course will be a detailed study of the most pivotal event of the 20th century. Emphasis will be placed on the major political and military leaders of the conflict along with the common soldiers. Focal points will include the pre-war causes, world leadership biographies, theaters of operations, training, weaponry, and technological advancement. Students will examine the war's impact on the home front, factory production, POW/interment camps, and the treatment of minorities. Special attention will be given to the experience of the average soldier, sailor, airman, marine, and citizen.

one nine week course

elective

prerequisite: strong interest in the subject

grades: 9, 10, 11, 12



Technology Education

Architectural Design I (Course #634)

.50 credit

Students will design their own residential dwelling and draw a set of working plans for that design. Drawings will be completed using an architectural design software. Drawings to be completed include floor plans, elevations and a 3-D model.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Architectural Design II (Course #638)

.50 credit

This course is a continuation of Architectural Design I with students learning how to design individual rooms of a residential dwelling taking into consideration traffic flow through the house. Using an architectural design software, students will create a set of working drawings based on their designs. Drawings to be completed include floor plans, elevations, 3-D models and a walk-through.

one nine week course

elective

prerequisite: Architectural Design I

grades: 9, 10, 11, 12

Computer Animation (Course #349)

.50 credit

Students will use a professional computer animation tool to study two-dimensional animation as it pertains to web development. The animation will be used to enhance the content and design of a web page.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Engineering Design I (Course #635)

.50 credit

This course provides an introduction to computer aided drafting, CNC machining and the engineering design process. Student will use CAD software to compete multi-view projections with dimensions as well as 3-D models. Using CAD drawings students will learn how to produce parts on CNC machines. Students will also be introduced to the engineering design process. (This course replaced CAD I.)

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Engineering Design II (Course #636) .50 credit

This course is a continuation of Engineering Design I with students learning more advanced CAD and CNC concepts. Students will use CAD software to complete 3-D models incorporating section views, auxiliary views and working drawings. Students will use the engineering design process to design a product to be produced utilizing advanced CNC machining concepts.

one nine week course **elective**
prerequisite: Engineering Design I **grades: 9, 10, 11, 12**

Home Maintenance (Course #601) .50 credit

This course is designed to teach students about basic home repairs & maintenance. Items to be covered include drywall repair, painting, wallpaper, electrical and plumbing repair, furniture assembly and ceramic tile repair. These skills will be acquired through hands on technology learning activities.

one nine week course **elective**
prerequisite: none **grades: 9, 10, 11, 12**

Intro to Metal Materials & Processes (Course #610) .50 credit

Introduction to Metals introduces students to the study of metal materials, design, tools and processes. Students will explore various aspects of metal manufacturing, including how the processing and changing of raw materials can produce desirable products. During this process they will create custom manufactured projects while learning aspects of machine safety. This course will conclude with a manufacturing unit where students mass product a product.

one nine week course **elective**
prerequisite: none **grades: 9, 10, 11, 12**

Intro to Wood Material & Processes (Course #600) .50 credit

Introduction to Wood Material and Processes introduces students to wood material, tools and equipment. Students will develop an understanding of design and transform the design into a completed wood product. Students will study safety, fabrication, assembly and finishing of a wood product. The course concludes with a construction unit covering structural design and processes.

one nine week course **elective**
prerequisite: none **grades: 9, 10, 11, 12**

Innovation & Invention (Course #624) .50 credit

GM is now offering an innovative 21st century learning curriculum designed to teach career readiness, design, and problem solving skills. (Inventionland is America's largest private invention factory whose unique makerspace and "cool office" environment draws visitors worldwide.) Inventionland 9-step inventing method has helped Inventionland innovate and develop new products for years, these methods are now being taught in an educational setting. This course will revolve around real-world ideas, embracing creativity, engineering/prototype design, storytelling, marketing, and more.

one nine week course **elective**

Media Arts (Course #163)

.50 credit

Media Arts is a communications class. We focus on storytelling with the use of cameras and editing programs. Students will also enrich their technology skills using apps such as Google Docs, Google Drive, Wordpress (web design) and YouTube. Students will have the opportunity to create a portfolio creating video stories within their interests connected to our school. School Announcement projects will be selected to be shown to the rest of the school during Advisory.

one nine week course

elective

Power Technology (Course #626)

.50 credit

Power Technology provides a broad overview of energy, control systems, and transportation. Students will explore how energy and power systems can be made and how they may be utilized for problem solving. Transportation systems will be examined by looking at their functional processes and impacts.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Metal Production Systems (Course #612)

.50 credit

Metal Production Systems is an advanced study of metal material, design, equipment, and manufacturing processes. Students will examine the processes of manufacturing facilities and the advances that maintain manufacturing efficiency. Students will create custom metal projects through various manufacturing processes.

one nine week course

elective

**prerequisite: Intro to Wood Material & Processes
or Intro to Metal & Processes**

grades: 10, 11, 12

Robotics & CAM Technology (Course #628)

.50 credit

In this course students examine the different types, uses, power systems, and control techniques for robotics. Through lab experiments, student use the Scorbot robot to gain experience and develop their own practical use of the robot. In the CNC unit, students develop a basic understanding of machining, processor language and programming of the CNC mill, lathe and router. The course concludes with the study of Master CAM software and how to apply it to design and machining a product.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Wood Production Systems (Course #613)

.50 credit

Wood Production Systems is a continuation of Introduction to Woods. It is an advanced study of wood material, design and equipment. This class is geared towards students with an aptitude of working with their hands in a lab based classroom. Students will work through the design process to create a project. This class will require a lab fee for any materials used.

one nine week course

elective

**prerequisite: Intro to Wood Material & Processes
or Intro to Metal & Processes**

grades: 10, 11, 12



Vocal Music

Broadway Dinner Choir 9/10 (Course # 730)

.50 credit

Students in this choir will prepare for and perform at the annual Broadway Dinner. Opportunities are available for solo, small group and full choir singing. To participate in this choir, you must also be registered for a large choir group. Students are required to provide their own costume(s). This may require a rental fee or purchase of materials.

one nine week course

elective

prerequisite: participation in one other

grades: 9, 10

elective large choir (Holiday Choir or Spring Concert Choir)

Broadway Dinner Choir 11/12 (Course # 731)

.50 credit

Students in this choir will prepare for and perform at the annual Broadway Dinner. Opportunities are available for solo, small group and full choir singing. To participate in this choir, you must also be registered for a large choir group. Students are required to provide their own costume(s). This may require a rental fee or purchase of materials.

one nine week course

elective

prerequisite: participation in one other

grades: 11, 12

elective large choir (Holiday Choir or Spring Concert Choir)

Electronic Music (Course # 704)

.50 credit

Students will learn the basic concepts of synthesizers, MIDI, computer applications in music, Analog and Digital recording techniques, effects, processors, etc. This course is hands on. Students will have the opportunity to experiment with many different types of electronic equipment. Limited space is available.

one nine week course

elective

prerequisite: must read in at least one

grades: 9, 10, 11, 12

clef, bass or treble as well as have an understanding of rhythm notation

Holiday Choir 9/10 (Course #734)

.50 credit

This mixed choir meets during the second term and performs traditional holiday music. Performances at holiday concerts and gatherings will be part of the experience. Students signing up for this course need to have no prior singing experience.

one nine week course

elective

prerequisite: none

grades: 9, 10

Holiday Choir 11/12 (Course #735)

.50 credit

This mixed choir meets during the second term and performs traditional holiday music. Performances at holiday concerts and gatherings will be part of the experience. Students signing up for this course need to have no prior singing experience.

one nine week course

elective

prerequisite: non.

grades: 11, 12

Madrigal Singers (Course # 712)

.50 credit

This course is designed for the highly motivated vocalist looking for an intense, high-paced performing ensemble focusing on music of the Renaissance and Baroque periods.

one nine week course

elective

prerequisite: instructor's permission

grades: 9, 10, 11, 12

(Audition may be required)

Music Theory I (Course #706)

.50 credit

Basic elements of music compositions will be taught leading to the realization of four-part harmonies. Melodic and rhythmic dictation, sight singing and ear training will be included.

one nine week course

elective

prerequisite: instructor's permission

grades: 10, 11, 12

Spring Concert Choir (Course #710)

.50 credit

Participants in Concert Choir are exposed to elements of proper vocal technique, music reading and stylistic elements of different musical periods. Students participate in the spring choral concert.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Vocal Jazz Ensemble (Course #714)

.50 credit

This course is designed for highly motivated vocalists, looking for a more intensive, high-paced performing ensemble with a focus on vocal music.

one nine week course

elective

prerequisite: instructor's permission

grades: 9, 10, 11, 12

(Audition may be required)

Women's Ensemble (Course #711)

.50 credit

This course is designed for all high school age females enrolling in choir for the first time. Basic singing and music reading techniques are emphasized. Opportunities for performance will be part of the experience.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

Acting & Set Design for Musicals (Course #736)

.50 credit

This class will focus on assisting with the production duties for the fall musical. We are looking for students that are interested in taking on leadership roles with: stage crew, stage managing, costumes, set construction, choreography (dance captain); and production duties such as publicity, advertising, social media and ticket sales. Students will take on these roles as “internships” and will be assigned to assist members of the production team. This class will be similar to having an independent study with more specific structure and guidelines.

one nine week course

elective

prerequisite: none

grades: 9,10,11, 12



World Languages

*Please Note: Some of the language courses are only offered in the Spring Semester

AP Chinese Language and Culture (Course #545_01)

1.00 credit

Building upon previous acquired knowledge, this course is aimed to review and improve communication skills. Students will develop more confidence in interacting in Mandarin Chinese while further expanding and solidifying their knowledge of characters, grammar and pronunciation patterns through intensive practice. Students work independently or in small groups.

one semester course

elective

prerequisite: Mandarin III

grades: 11, 12

AP French Language and Culture (Course #505_01)

1.00 credit

AP French Language and Culture is a challenging course that is taught almost entirely in French with an immersion-like setting. This course will allow students to improve their proficiency across the three modes of communication: Interpretive, Interpersonal, and Presentational. This course is designed to help students prepare for the AP exam and is authorized as an Advanced Placement course by the AP Course Audit created by The College Board.

one semester course

elective

prerequisite: French III

grades: 11, 12

AP Spanish Language and Culture (Course #515_01)

1.00 credit

This a challenging course that is taught exclusively in Spanish with an immersion-like approach. It is appropriate for students who learn in a high energy and interactive setting. The goal of the course is to equip students with Intermediate-High to Advanced-Low presentational, interpersonal, and interpretive skills in reading, writing, speaking, and listening. By taking the AP course and earning a successful score on the AP Exam, students can stand out in college admissions and earn college credits by skipping out of introductory courses.

one semester course

elective

prerequisite: Spanish III

grades: 11, 12

Asian Cultural Studies (Course #544)

.50 credit

After a brief introduction to the asian region, this course focuses on East Asia and India. We will examine and explore the contemporary and historic aspects of both cultures. This is a project-based learning course, students will participate in many hands-on activities and conduct research on various topics.

one nine week course

elective

prerequisite: none

grades: 9, 10, 11, 12

French I (Course #500)**1.00 credit**

French I is designed for the student who desires to learn basic French. Grammar and vocabulary will be provided with an emphasis on culture, history, geography, and daily customs of French-speaking countries.

one semester course**elective****prerequisite: none****grades: 9, 10, 11, 12****French II (Course #501)****1.00 credit**

The students will continue to develop and refine their working knowledge of French. The four language skills (reading, writing, speaking, and listening comprehension) will be greatly expanded with concentration in travel and survival French.

one semester course**elective****prerequisite: French I****grades: 9, 10, 11, 12****French III (Course #502)****1.00 credit**

As a continuation of French II, the students will polish their intermediate French skills. French III is appropriate for those who are seeking to fulfill university requirements as well as those who are preparing for AP French Language and Culture.

one semester course**elective****prerequisite: French II****grades: 10, 11, 12****French V (Course #504)****.50 credit**

This course will focus on higher levels of conversations in French, reading, and writing at advanced levels. The class takes place in an immersion mode.

one nine week course**elective****prerequisite: AP French Language and Culture****grades: 11, 12****Mandarin I (Course #540)****1.00 credit**

This introductory course is designed to expose students to the Mandarin Chinese language and culture of the Chinese-speaking world. Students will develop novice proficiency in the four modalities of language learning: listening, speaking, reading, and writing. There is a strong emphasis on the Chinese phonetic system and basic character rules at this level. Students will be able to communicate in very basic everyday-life situations.

one semester course**elective****prerequisite: none****grades: 9, 10, 11, 12****Mandarin II (Course # 541)****1.00 credit**

Students will continue to develop more fundamental working knowledge of understanding, speaking, reading, and writing in Mandarin Chinese. Students will recognize and respond appropriately to most common spoken situations. This class will focus on improving student's grammar structure and basic sentence pattern.

one semester course**elective****prerequisite: Mandarin I****grades: 9, 10, 11, 12**

Mandarin III (Course # 542)

1.00 credit

Students will transition to the intermediate level by developing Mandarin Chinese language skills with emphasis on practical vocabulary, idiomatic usage and expanded grammar.

one semester course

elective

prerequisite: Mandarin II

grades: 10, 11, 12

Spanish I (Course # 510)

1.00 credit

Spanish I is an introductory language and culture course. Students will begin as Novice-Low learners. By the end of the semester, students will gain a working knowledge of the people, language, culture, history, geography, and daily customs of Hispanic countries. Students are expected to reach a proficiency level of Novice-High in preparation for Spanish II.

one semester course

elective

prerequisite: none

grades: 9, 10, 11, 12

Spanish II (Course # 511)

1.00 credit

This course will further develop and refine Spanish language proficiency. Through a continued exploration of the Hispanic world, students will be expected to reach a proficiency level of Intermediate-Low in preparation for Spanish III.

one semester course

elective

prerequisite: Spanish I

grades: 9, 10, 11, 12

Spanish III (Course # 512)

1.00 credit

As a continuation of Spanish II, students will polish their Intermediate reading, writing, listening and speaking skills. Spanish III is appropriate for those who are seeking to fulfill basic university requirements as well as those who wish to enroll in AP Spanish Language and Culture.

one semester course

elective

prerequisite: Spanish II

grades: 10, 11, 12

Spanish V (Course #514)

.50 credit

This course will focus on higher levels of conversations in Spanish reading and writing at advanced levels. Students work independently, participating in a variety of reading and writing activities.

one nine week course

elective

prerequisite: AP Spanish Language and Culture

grades: 11, 12