Mercer Area Middle–High School

MUSTANGS

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ACADEMIC HANDBOOK
2023 - 2024

Dear Student:

Mercer Area Middle-High School offers a wide variety of courses, most of them for either a semester or a full year. The guidance counselors have a good picture of your capabilities and interests and will undoubtedly make excellent course suggestions. Still, it is you who has to make the actual choices. They are <u>important</u> choices.

Planning your program of study at Mercer is a serious undertaking. You must give this undertaking the most careful consideration. Course selections should be based on your interests, abilities, aptitudes and needs. You must establish goals if a meaningful program of study is to be achieved. Consultation with key individuals including your parents, teachers, and guidance counselors can attain these goals.

Good luck, and don't forget to ask questions if you have any concerns about your schedule. The teachers & counselors will do their best to answer them.

Sincerely,

Eric S. Mausser
Principal
Mercer High School

Amanda Simpson
Principal
Mercer Middle School

SPECIAL EDUCATION

Students in need of special education services receive an evaluation by a multi-disciplinary team. Evaluation is provided on a non-discriminatory basis. The results of the evaluation will be utilized to plan for appropriate instructional methods to teach the student. Each student receiving special education services has an Individual Education Plan developed on an annual basis and a re-evaluation conducted every three years to assure program appropriateness. The Mercer Area School District employs a school psychologist and a coordinator of special education. All handicapped students are entitled to a free and appropriate public education.

GRADUATION REQUIREMENTS

In order to be eligible for graduation from the Mercer Area School District, a student shall:

- Complete the required courses of instruction
- Complete a student graduation project.
- Demonstrate mastery of the approved PA Academic Standards.

These requirements are further outlined below.

Required Credits by Subject:

Subjects	**2023**	**2024**	**2025**	**2026**
Language Arts	4.0	4.0	4.0	4.0
Social Studies	4.0	4.0	4.0	4.0
Science/Environment & Ecology	3.0*	3.0*	3.0*	3.0*
Mathematics	3.0*	3.0*	3.0*	3.0*
Physical Education	1.0**	1.0**	1.0**	1.0**
Health	1.0	1.0	1.0	1.0
Family & Consumer Science	0.5	0.5	0.5	0.5
Arts & Humanities	1.0	1.0	1.0	1.0
Computer Applications/Technology	1.0***	1.0***	1.0***	1.0***
Foreign Language	1.0****	1.0****	1.0****	1.0****
Electives	5.0	5.0	5.0	5.0
Graduation Credits:	**24.5**	**24.5**	**24.5**	**24.5**

* Four (4) science and mathematics courses are recommended.
** Mercer County Career Center students may be exempt.
*** Computer Applications/Technology credit may be obtained through any courses identified to meet that requirement.
**** Two (2) foreign language courses are recommended.

Students wanting to be eligible for the honor of valedictorian or salutatorian must be considered a full-time student. For a student to be considered full-time, he/she must be scheduled for five (5) credits of classes at Mercer High School during his/her senior year. Students scheduled for a college class at a local university/college are considered full-time if they have four (4) credits of classes scheduled during their senior year at Mercer High School.

GRADE LEVEL CLASSIFICATION

Students will move along with their classmates regardless of their credit status. Students are responsible to make up failures in a timely fashion in order to graduate with their classmates. No student may accrue more than 1 ½ credits of failure on his/her transcripts. Courses failed beyond this 1 ½ credit limit must be made up in summer school or through an approved program which meets Mercer High School standards for credit before a diploma will be issued.

Course Credits

Credits shall be based on meeting days with the following standards:

Year Long Courses
1 day per week..... 0.20 credits
2 days per week..... 0.40
3 days per week..... 0.60
4 days per week..... 0.80
5 days per week..... 1.00

Semester Courses
2 days per week..... 0.20
3 days per week..... 0.30
5 days per week..... 0.50

STUDENT GRADUATION PROJECT:

According to the revised Pennsylvania Chapter 4 Curriculum Regulations, all students are required to complete a senior project as part of their graduation requirements. The senior project is comprised of seven (7) components:

1) A minimum of twenty (20) hours of service learning
2) Thank you to area(s) where community service took place
3) Creation of a professional resume
4) A minimum of five (5) hours of job shadowing experience
5) Thank you letter to supervisor/individual associated with job shadowing experience.
6) One (1) page summary of job shadowing experience using guiding questions.
7) Successful completion of an exit interview

Each student will meet with one of the principals and/or school counselor periodically throughout the 11th & 12th grade year to review their progress with the senior project. The advisors will maintain documentation that the student is completing the various components and ready the student for the final component (exit interview).

A 15-minute exit interview will take place in February of each year. The exit interview committee will consist of two to four teachers as well as members of the community. During the exit interview, the student will answer questions of the committee in a manner similar to a professional job interview. Feedback will be given to the students by the interview committee at the conclusion of the exit interview.

The senior project will be assessed as follows:
Not Pass: One of the seven components is not complete
Pass: All seven components are complete

Students who receive a "Not Pass" will be expected to meet with their principal and continue to complete the senior project. Students will be given a final opportunity to pass the senior project in early May. Students who do not pass the senior project in May will not be eligible for graduation and will be required to make up the senior project in June.

MASTERY OF ACADEMIC STANDARDS FOR GRADUATION:

Each student must demonstrate mastery of the PA Academic Standards either on the Keystone Exams (Algebra I, Biology, & Literature), Pennsylvania Alternate System of Assessment (PASA), or through the Act 158 pathways. The state assessment shall be administered at the end of each course and a proficient score is required for mastery. If a student does not demonstrate proficiency at the end of the course on any of the three exams – Algebra I, Biology, & Literature – they may retake these exams the during the subsequent testing sessions (Winter or Spring) until they demonstrate proficiency.

COLLEGE ACCELERATION

The fourth year of all required subjects shall not be required if the student has been accepted by an accredited institution of higher learning. A high school diploma from Mercer High School will be awarded to this type student when the following conditions are met:

1) Presents evidence to the High School Principal of having completed the college freshman year successfully.
    a) The evidence may be a transcript of credits showing the student has passed their freshman year successfully, or
    b) The evidence may be a letter from the college stating the student has passed the freshman year successfully

ACCELERATION POLICY
(Credit for Examination Procedure)

Policy:

The Credit by Examination policy, commonly referred to as "testing out", was revised and implemented November 2006. All students will follow the established guidelines in order to be eligible for Credit by Examination.

Definition of Acceleration:

Acceleration is advancement through the general education curriculum. In order for a student to receive advanced studies, he or she must pass on examination of a content area course. Students will be given teacher-prepared tests aligned with state standards and district curriculum. Students will be given a course syllabus to help prepare for the examination. In addition, an informal group meeting between students and teachers will take place during the month of May to aid student understanding and expectations. Students have the summer for study and take the examinations during the first two weeks of August.

Guidelines:

Students must meet the eligibility criteria in order to apply for credit by examination. A specially designed application form must be submitted to initiate the acceleration process. The format of the application follows each of the eligibility criterions. The student must have a current grade of an "A" in order to accelerate in the same content area (i.e. You must have an "A" in Algebra I in order to test out of Algebra II – current grade is determined by final grade from last school year and at least the first two marking periods of the current school year.).

Application:

Acceleration is open to all students. An application packet may be picked up in the guidance office. It must be completed in its entirety. All applications must be returned with the student's schedule request in March.

Procedure:

Complete the application form and return it to the office of the Assistant Superintendent. The form must be completed in its entirety. Students will be notified during April if they are permitted to accelerate. During the month of May students will be given a course syllabus, course materials, and a meeting will be scheduled with the teacher of the course being studied during the summer. The Assistant Superintendent will contact you during the first week of August to schedule a time to take the exam. The exam will not be returned to you. If you pass the exam with 80% or better, you will receive a pass for the course, but the grade will not be part of your G.P.A. Your replacement course will be adjusted into your fall schedule.

Bring to the exam:

A pencil, the textbook and/or materials that you were given.

Mercer Virtual Academy (Cyber School Courses)

Students that enroll in a course/courses within a cyber school program (Mercer Virtual Academy or other institution) that **ARE OFFERED** at the middle-high school will receive the same weight & credit for successful completion of the course/courses.

Students that enroll in a course/courses that are **NOT OFFERED** at the middle-high school will receive the weight & credit that is determined by the administration. All approved courses will be listed within the academic handbook.

A student may enroll in a maximum of eight (8) credits during any academic year. Students that are completing a credit recovery program may enroll in additional courses may exceed the eight (8) credit maximum with prior administrative approval.

Students within the Mercer Area School District may enroll in a cyber course/courses within the Mercer Virtual Academy provided that the course is not offered within the building (elementary or high school). Grade, credit, & weight for successful completion of a course/courses will be factored into the student's GPA.

Students enrolled in the Mercer Virtual Academy may enroll in a unified arts course/courses (art, industrial art, and/or music) that are offered during the school day at the middle-high school.

Coursework Completed Outside Mercer Middle-High School

Students may enroll in a course/courses through a college/university and/or a cyber program that are **NOT OFFERED** within the Mercer Area School District and/or the Mercer Virtual Academy. In this instance, **s**tudents will not receive credit for completion of these courses and it will not appear on a student's transcript. Grade Reports and/or transcripts from the outside program (college/university and/or cyber program) will be placed within a student's file when provided.

Students may supplant/replace a required course within the curriculum by enrolling in a course/courses at a college/university and/or through a cyber program that **ARE OFFERED** within the Mercer Area School District and/or the Mercer Virtual Academy. The requirements/procedures for completing this process include the following:

- The course syllabus & requirements will be reviewed before administrative approval.
- Credit for completion of a course/courses will be based on a Pass/Fail scale and will not be calculated into a student's GPA.
- The course will be listed on a student's transcript as the course that was replaced.
- If the student is planning to take the course(s) at the college/university during the school day, it must fit in their class schedule. The student and/or their family is responsible for all financial aspects associated with enrolling in a course/courses through a college/university and/or a cyber program that is not affiliated with the Mercer Virtual Academy.
- Grade Reports and/or transcripts from the outside program (college/university and/or cyber program) will be placed within a student's file when provided.

Transfer Grades

Grades, credit, & weight for coursework completed by transfer students prior to enrolling within the Mercer Area School District will be recalculated to reflect the current courses that are listed within the Mercer Middle-High School Academic Handbook. If a course/courses does not appear in the Mercer Middle-High School Academic Handbook, the grade, credit, & weight for the completed coursework will be calculated using the information provided by the previous school district/institution to best reflect the grading scale, credit, & weight listed within the Mercer Middle-High School Academic Handbook.

Independent Study Courses

Students must request to take an independent study course. Approval will be given by the administrator & course instructor. Once approved, students will receive the grade & weight for an independent study course that matches the content of the regular course.

Dual Enrollment Courses

The Mercer Area School District currently has a Dual Enrollment agreement with Saint Francis University. Students may register for dual enrollment courses taught at Mercer Middle-High School and receive college credit by completing the proper paperwork with Saint Francis University.

COURSE CREDITS

Credits shall be based on meeting days with the following standards in effect.

Year-Long Courses

1 day/week..... 0.2
2 days/week..... 0.4
3 days/week..... 0.6
4 days/week..... 0.8
5 days/week..... 1.0

Semester Courses

2 days/week..... 0.2
3 days/week..... 0.3
4 days/week..... 0.4
5 days/week..... 0.5

COURSE CREDITS (Grades 9-12)

Academic Chemistry (Gr. 10-12)..... 1.4
Advanced Biology (Gr.11-12).....1.0
Adv. Chamber Choir (Gr. 10-12).....1.0
Adv. Fam. & Cons. Sci. (Gr. 9-12)..... 1.0
Advanced Government (Gr. 12)..... 1.0
Adv. Multimedia Prod. (Gr. 9-12)... 0.5
Adv. Wind Ensemble (Gr. 10-12)... 1.0
Aerobics (Gr.10-12)..... 0.5 or 1.0
Algebra I (Gr. 9-12)..... 1.0
Algebra II (Gr. 9-12)..... 1.0
Algebra III/Trig. (Gr. 10-12)..... 1.0
American History (Gr. 10)..... 1.0
Amer. Popular Music (Gr. 9-12)..... 1.0
AP Calculus (AB) (Gr. 11-12)..... 1.0
AP Calculus (BC) (Gr. 12)..... 1.0
AP Chemistry (Gr. 11-12)..... 1.4
AP English (Gr. 12)..... 1.0
AP Psychology (Gr. 12)..... 1.0
App. Discrete Math (Gr. 11-12)..... 1.0
Basic Guitar (Gr. 9-12)..... 0.5
Biology (Gr. 9)..... 1.0
CAD/Robotics (Gr. 9-12)..... 1.0
Career Center (Gr.11-12)..... 3.0
Chamber Choir (Gr. 10-12)..... 1.0
Comp. Sci. Essentials (Gr. 9-12)..... 1.0
Comp. Sci. Principles (Gr. 10-12)..... 1.0
Concert Band (Gr. 9-12)..... 1.0
Concert Choir (Gr. 9-12)..... 1.0
CP English (9-12)..... 1.0
Culinary Arts I, II (Gr. 10-12)..... 1.0
Cybersecurity (10-12)..... 1.0
Drawing (Gr. 9-12)..... 0.5 or 1.0
English (Gr. 9-12)..... 1.0
Families-Living Today (Gr. 11-12).... 0.5
Financial Algebra (Gr. 10-12)..... 1.0
Fine Arts I, II, III, IV (Gr. 9-12)..... 1.0
Fitness (Gr. 10-12)..... 0.5 or 1.0
French (Gr. 9-12)..... 1.0
Fund. of Public Speak (Gr. 11-12).... 0.5
General Science (Gr. 11-12)..... 1.0
Geometry (Gr. 9-12)..... 1.0
Graphic Art (Yearbook)(Gr.11-12)... 1.0
Health (Gr. 9).....0.5
Health (Gr. 11).....0.5
History of Broad. (Gr. 9-12).....0.5
Journalism (Gr. 9-12).....1.0
Keystone Algebra I (Gr. 9, 10)..... 1.0
Keystone Biology (Gr. 10)..... 1.0
Latin (Gr. 9-12) 1.0
Leather (Gr. 9-12).....0.5
Mandarin Chinese (Gr. 9-12).....1.0
Manufacturing (Gr. 9-12)..... 1.0
Metals (Gr. 9-12)..... 0.5
Modern World History (Gr. 9)..... 1.0
Multimedia Production (Gr. 9-12)...0.5
Music Theory (Gr. 9-12) 1.0
Natural Living (Gr. 10-12)..... 1.0
Physical Education (Gr. 9-12)..... 0.5
Physical Science (Gr. 10)..... 1.0
Physics (Gr. 11-12).....1.4
Physiology (Gr. 11-12)..... 1.0
POD/Economics (Gr. 11)..... 1.0
Pottery (Gr. 9-12)..... 0.5 or 1.0
Pre-Calculus (Gr. 10-12) 1.0
Social Studies Survey (Gr. 12).....1.0
Spanish (Gr. 9-12)..... 1.0
Statistics (Gr. 11-12).....1.0
STEM Science (Gr. 11-12)..... 1.0
Studio Art I, II, III, IV (Gr. 9-12).....1.0
Theater Arts (10-12).....1.0
Ukulele (Gr. 9-12) 0.5
Volunteer (Gr. 12).....1.0
Wind Ensemble (Gr. 9-12)..... 1.0
Wood Technology (Gr. 9-12)..... 1.0

Weighted Courses:

1.4 = AP Calculus (AB), AP Calculus (BC), AP Psychology, AP English, AP Chemistry

1.3 = French IV, V; Physics; Pre-Calculus; Spanish IV, V

1.2 = Advanced Biology, Academic Chemistry, Advanced Government, Algebra III/Trigonometry, College Prep English 11/12, French III, Physiology, Spanish III, Statistics

1.1 = App. Discrete Math, College Prep English 9/10, French II, Spanish II, Adv. Wind Ensemble, Adv. Chamber Choir, Latin II, Chinese II

MERCER COUNTY CAREER CENTER

The Mercer County Career Center is available to students in grades 11 and 12 so they may experience a variety of occupations. The technical experience will act as a testing ground for the individual's career choice to ensure through hands-on experience that the chosen career is one in which the student is capable of achieving success and will provide meaningful and satisfying employment upon graduation. The result is a better prepared worker who is satisfied with his/her employment.

Parents are urged to contact Mercer Area High School with questions concerning assessment, special services, and/or enrollment in career and technical education. Please contact the high school counselor or the special education coordinator at 724-662-2272.

Automotive Technology

Automotive Technology allows students to perform a wide range of diagnostics, repairs, and preventative maintenance on automobiles and light trucks. Students will gain the technical knowledge and skills to obtain an entry-level position and/or pursue postsecondary education. The program's curriculum enables students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes the diagnosis and testing of malfunctions in and repair of engines, fuel, electrical, cooling, steering, suspension and brake systems. Students also prepare to obtain certifications for PA Safety Inspection; Emissions Inspection; and Refrigerant, Recovery, and Recycling.

Carpentry

Carpentry prepares students to obtain entry-level positions in the construction or wood industries, apprenticeships in trade unions and/or to pursue enrolling in postsecondary institutions for degrees in construction, sales, or management. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual and group projects and activities. The program's instruction includes units on safety, hand and power tools, blueprint reading, framing, interior and exterior finish, construction materials, measuring, estimating, and building codes. Students also study technical mathematics, residential steel-framing, and cabinetmaking.

Collision Repair and Refinishing

Collision Repair and Refinishing prepares students to obtain an entry-level position in auto body repair and/or to pursue postsecondary education. The program's curriculum enables students to develop technical knowledge through classroom theory lessons and acquire a core set of skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on workplace skills, safety techniques, vehicle design and function, structural and non-structural welding, estimating repair costs, collision repair procedures, and automotive painting and refinishing. Students learn these fundamental skills of repairing and refinishing damaged vehicles using the tools, products, and materials found in auto body shops and repair facilities.

Computer Information Technology

Computer Information Technology prepares students to obtain entry-level employment and/or provides the foundation for post-secondary success. The program's curriculum enables students to develop a basic level of knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on lab experiences. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group activities. The program will provide students experience in the administration and support of computer networks, which includes user and group management, server security, network sharing, operating systems, user and workstation security, help desk support, computer repair and remote access. Students will focus their study on network technologies, network devices, network management, tools and security. Computer Information Technology students will be expected to read and interpret complex instructions, technical literature and solve a variety of technical problems.

Computer Programming

Computer Programming prepares students for either entry-level employment in a variety of rapidly growing computer careers or continuing education at the post-secondary level. Students will be introduced to many computer concepts including the following: flowcharting, structured programming for the Internet, games programming, and the programing languages COBOL, SQL, and Visual Basic. Students will have the opportunity to explore a variety of programming languages, complete projects and pursue industry recognized certifications. The skills learned in this program serve as a foundation needed to pursue postsecondary degrees leading to a career as a software developer, programmer, application developer or game designer.

Cosmetology

Cosmetology trains students to become licensed cosmetologists in specialized or full-service salons. The program's curriculum provides concentrated studies in the professional competency areas unique to the cosmetology field. Students develop a knowledge base through classroom theory lessons and perfect their clinical skills by applying learned knowledge in the program's student-operated salon. Classroom lessons include lectures, reading and writing assignments, demonstrations, individual and group projects, as well as other activities. The programs instruction includes units on shampooing, conditioning, cutting and styling hair; chemical texture services and hair coloring techniques; and providing facials, manicures and pedicures. Personal safety, professionalism, and the sanitation and disinfection of equipment and facilities are emphasized. Students also study business management with a focus on managing a salon.

Culinary Arts

Culinary Arts prepares students to obtain entry-level employment related to institutional, commercial, or independently owned food establishments and other food industry occupations and/or provides a foundation for students who pursue acceptance into a postsecondary culinary program. The program's curriculum enables students to develop knowledge through classroom theory lessons and acquire culinary skills by applying learned knowledge in the program's fully equipped commercial kitchen and dining room. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects and activities. The program's instruction includes units on use and care of utensils and food preparation equipment; safety; sanitation procedures, nutrition basics, and recipes preparation. Students develop and practice skills through hands-on activities and experiences related to planning, selecting, preparing, and serving of quality food and food products.

Diesel Technology

Diesel Technology prepares students to obtain entry-level employment and/or to pursue postsecondary education. The program's curriculum enables the students to develop basic knowledge through classroom theory lessons and acquire a core set of technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety, diesel engine mechanics, suspension and steering, brake systems, electrical and electronic systems, and preventive maintenance. Students develop skills for troubleshooting problems; disassembling, rebuilding, and reassembling engines; applying electrical principles to service electrical/electronic systems; inspecting, repairing or replacing various systems' components; and performing preventive maintenance on medium/heavy vehicle systems.

Early Childhood Education

Early Childhood Education allows students to obtain a variety of entry-level childcare occupations in day care centers and preschools and/or provides a foundation for students who pursue a postsecondary early childhood education program. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire care giving, teaching, and managing skills by applying learned knowledge in the program's fully equipped preschool. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects and activities. Instruction includes units on growth and development; nutrition; program play activities; child abuse and neglect; learning experiences for children; and laws, regulations, and policies relating to childcare services.

Electrical Occupations

Electrical Occupations prepares students to apply technical knowledge and skills necessary to install, operate, maintain and repair electrically-energized residential, commercial and industrial systems, and DC and AC motors, controls and electrical distribution panels. Instruction emphasizes practical application of circuit diagrams and use of electrical codes and includes blueprint reading, sketching and other subjects essential for employment in the electrical occupations. Reading and interpretation of commercial and residential construction wiring codes and specifications, installation and maintenance of wiring, service and distribution networks within large construction complexes are also critical components of the program.

Health Care Careers

Health Care Careers prepares students to obtain entry-level positions in the health field and/or to pursue postsecondary education. The program provides students with health career exploration activities, instruction of basic skills, which are fundamental to all areas of health care, and clinical experiences. Students develop health care knowledge through classroom theory lessons and practice health care skills in a laboratory setting prior to their clinical assignments. Classroom lessons include lectures, reading and writing assignments, demonstrations, and individual and group projects. The program's core instruction includes units on medical terminology, anatomy and physiology, basic clinical skills, aseptic techniques, OSHA regulations, and infection control.

Innovation and Entrepreneurial Development

Innovation and Entrepreneurial Development enables students to learn first-hand about the risks and rewards of starting and operating a small business. The program's curriculum provides students with knowledge and skills of fundamental business concepts and entrepreneurship. PowerPoint presentations, reading and writing assignments as well as hands-on activities provide students with an overview of the steps and considerations involved in turning an idea into a business, identifying a passion or hobby that can provide a product or service, researching the market, and weighing the risks of starting a small business. The program's core instruction includes units on economic principles, business plans, business related math skills, technology skills and sales along with marketing techniques. Students engage in various business activities related to each planned unit.

Logistics – Material and Supply Chain Management

Logistics and Materials Management is designed to prepare individuals for entry level employment in this industry. Students will learn and perform logistical functions associated with receiving, storing, shipping goods, and the various systems and record keeping for supply chain management. Students with good attention to detail who enjoy a fast-paced, hands-on, physical workplace would be successful in this program. The curriculum provides instruction in the use of powered material, handling equipment, and OSHA safety and ergonomics. Supply chain management, automated inventory control systems, purchasing, receiving, order selections, packaging, and shipping methods are presented. Academic subjects include business mathematics and communications. The course includes job retention skills and customer relations.

Precision Production Metals

Precision Production Metals prepares students to obtain entry-level employment in the machine tool industry, apprenticeships sponsored by unions or manufacturers, and/or to pursue enrollment in postsecondary programs. The program's curriculum enables students to develop a knowledge base through classroom theory lessons and acquire technical skills by applying learned knowledge in hands-on shop experiences. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program incorporates national skills standards developed by the National Institute of Metalworking Skills (NIMS). Instruction includes units on bench work and the operation of lathes, power saws, grinders, milling machines, drills and computer operated equipment. Students also study the use of precision measuring instruments such as layout tools, micrometers and gauges as well as blueprint reading. Emphasis is on machining parts for the NIMS performance exams.

Welding

Welding prepares students to obtain entry-level employment as a welder or in related positions in all types of small and large companies and/or to pursue enrolling in postsecondary programs such as welding engineering or metallurgy. The program's curriculum enables students to gain a knowledge base through classroom theory lessons. Program activities allow students to put their classroom learning into hands-on practice of technical skills. Classroom lessons include lectures, reading and writing assignments, and demonstrations. The program's instruction includes units on safety practices, gas cutting and welding, arc welding in various positions, and types and uses of electrodes and welding rods. Students also learn to fabricate and join metal parts according to diagrams, blueprints, and specifications.

For more information on Mercer County Career Center programs and services, please visit www.mercerccc.org.

ENGLISH

9th GRADE ENGLISH

This course consists of developing and improving skills in grammar, composition, speech, and literature. Parts of speech, parts of the sentence, verbal usage, and agreement are stressed. This knowledge is then applied by writing book reports and journals. There is weekly testing on the provided spelling tests. Three novels, many short stories, and Shakespearian drama are included in the curriculum. Various speaking skills are also developed through speeches, book reports, and class participation.

9th GRADE COLLEGE PREP ENGLISH

This course consists of developing and improving skills in grammar, composition, speech, and literature. Parts of speech, parts of the sentence, verbal usage, and agreement are stressed. This knowledge is then applied by writing sentences and paragraphs. Other writing exercises include book reports, journals and a research paper. There is weekly testing on the provided spelling and vocabulary lists. One novel, many short stories, Shakespearian drama, and poetry are included in the curriculum. Various speaking skills are also developed through speeches, book reports, group projects, and class participation.

10th GRADE ENGLISH

This course is specifically designed to prepare students to be successful readers and writers in the real world and on the Keystone Exam. The major focus of the course is reading comprehension through modeling, comprehension strategies, and vocabulary study. Readings will include short stories and poems from the Prentice Hall literature series, a biography, several novels including *Notes from the Midnight Driver, Touching Spirit Bear, I Am the Cheese,* and *The Pigman*, and 2 full length plays: *12 Angry Men* and *A Raisin in the Sun*. In addition, paragraph and essay writing will be reviewed along with selected mechanics and usage. Students will also complete several speeches and a propaganda unit.

10th GRADE COLLEGE PREP ENGLISH

This rigorous course is designed to prepare students for successful work in college. Reading will be completed outside of class and will include several plays: *As You Like It, A Raisin in the Sun,* and *Our Town,* selected short stories and poems from the Prentice Hall literature series, and at least 2 novels: *A Separate Place* and *Brave New World*. Discussions will focus on critical thinking, vocabulary, and drawing inferences. In addition, students will work on honing writing skills necessary for success in college, including essays, a required research paper, and a review of usage and mechanics. Students will also complete speeches and a propaganda unit. Students should expect nightly readings and long term assignments.

11th GRADE ENGLISH

There are three major divisions of English for juniors: grammar, composition, and communications; American literature; and vocabulary. In grammar, composition, and communications, students are required to study the parts of speech, sentence structuring, and writing. Journal assignments are given. In American literature students are exposed to the beginnings of American literature and to various genres, such as chronicles, short stories, essays, novels, and dramas. A few of the works included are *Hiroshima*, *Of Mice and Men*, *The Crucible*. Vocabulary words are taken from various reading assignments, magazines, and texts. Daily attendance is extremely important because much of the work, including some reading assignments, is completed during class time.

11th GRADE COLLEGE PREP ENGLISH

Recommended Prerequisite: The student should have a minimum 70-75% average in College Prep English 10.

1) Composition - students express themselves in clear, direct, concise, and creative writings. (Journal -- students learn to notice their environment to discover entry topics, and students learn to organize and then verbalize their thoughts through the actual writing. Essays - students learn to present their opinions logically in a clear and concise style.

2) Vocabulary - students can isolate and identify specific Latin and Greek prefixes, roots, and suffixes. Since more than 50% of our language comes directly from Latin and Greek, by developing a working usage of specific prefixes, roots, and suffixes, students are able to identify words of context.

3) American literature -- students can explain the influence of American history on American literature and vice versa. The literature of any country or period reflects the thinking of that society. Through a study of the American novel and other forms of literature, students come to appreciate history's influence on our literature. Also, students can evaluate the artistry, style, and structure of literary forms. Through use of anthologies, students trace the development of American thought and philosophy from colonial times through the present day.

4) Usage -- students demonstrate their command of contemporary usage in both spoken and written English. Communication is necessary for people; by knowing and using correct English, students demonstrate their ability to make the most of all available tools of communication.

5) Literacy - students develop an ability to judge and evaluate what the media presents. With the constant bombardment of propaganda, prejudice, advertisement, and bias from all forms of the media, everyone needs to be aware of methods used to manipulate us. Through the study of propaganda devices, newspaper articles and advertising gimmicks, students learn how language is used.

12th GRADE ENGLISH

English 12 is the final class completed in the English curriculum. The focus for English 12 is to further sharpen and hone a student's ability to analyze, critically evaluate, and interpret literature. The student will further develop his or her skills through an exploration of major British works including *Beowulf, The Canterbury Tales,* and *Macbeth*. Students will also be challenged to further develop their research, writing, and vocabulary skills. Research projects include evaluating a vocation the student may be interested in pursuing after graduation and a paper analyzing a particular area of British culture, providing the student with further insight into British culture and lifestyle. Daily attendance is extremely important as most of the work and reading assignments are completed in class.

12th GRADE COLLEGE PREP ENGLISH

College Prep English 12 incorporates many of the materials and skills developed in English 12, but also extends several learning opportunities as well as adding additional works, content, and assignments that will better serve to prepare a student who plans to attend a two- or four-year institution upon graduation. Students will explore additional works to those studied in English 12 including *The Picture of Dorian Gray, The Rape of the Lock*, and several additional challenging poems that are omitted from the General English 12 curriculum. Students will focus upon developing their abilities to analyze, critically evaluate, and interpret literature independently of the instructor while also continuing to master skills in research, writing, and vocabulary. Research projects include an extended project focused upon a vocation and/or major the student may be interested in pursuing after graduation and a literary criticism paper on a British novel of his or her choice. Students are expected to complete the majority of the assignments and reading for this course outside of class. Students choosing to take College Prep English 12 should have completed College Prep English 11 with a minimum average of 70-75%.

ADVANCED PLACEMENT ENGLISH

Recommended Prerequisite: 10th & 11th grade College Prep English – final grade of an "A" or better; Keystone score of Advanced in the area of Literature; teacher recommendation from prior teacher in the College Prep English course.

This course presents a survey of primarily British literature by genre - poetry, drama, nonfiction, and fictional prose. Four summer readings and essays are required. Research, critical analysis, oral explications, and a multi-media project are components of the course. The AP Literature and Composition Examination will be offered.

FUNDAMENTALS OF PUBLIC SPEAKING (Grade 11 & 12)

College bound students will engage in fun and purposeful activities that improve speaking skills. Students learn basic delivery skills volume, projection, rate, expression and eye contact in short speeches. Students will learn important notecard and outline creation techniques that will carry over to other classes. Throughout semester the students will write, practice, and perform a series of speeches that include live and pre-recorded speeches. Technology will be utilized in the creation and distribution of speeches. The

speeches will vary in length and purpose, and will include an informative speech, a persuasive speech, a demonstration speech, an acceptance speech, a graduation speech, learning how to conduct and answer questions a formal interview, create a public service announcement, deliver a newscast, and recite a dramatic reading. All speeches are prepared in class using a step-by-step writing process, which includes revision and editing. Students are welcome to present speeches for a better grade after individual coaching. Discussion topics will include stage fright, and how to better handle it, and the class will dive deeper into what it means to be confident. The goal is to become a better speaker by encouraging a fellowship and environment of successful speakers and listeners.

SOCIAL STUDIES

MODERN WORLD HISTORY (Grade 9)

The "modern" period of world history began in approximately A.D. 1450, when much of Europe emerged from the feudalism of the Middle Ages and modern ways of life began. Our study begins with a review of the great civilizations which contributed to modern Western Civilization, and includes a brief study of the Medieval period. Study will then progress to the changes which occurred that led to our modern world. Time periods studied include: the Renaissance, the Age of Exploration, the Commercial Revolution, the Reformation, the Age of Absolute Monarchs, the Scientific Revolution, the Enlightenment, the Age of Revolution in England and America, the French Revolution, the Industrial Revolution, the rise of Nationalism, the Age of Imperialism, and concludes with a study of World War I and World War II. Students should gain an understanding of how and why the events which transpired in the time periods above shaped our modern world.

AMERICAN HISTORY (Grade 10)

The American History describes the history of the American people from the 1800's to the present. By acquainting students with their past, they will be better prepared to live responsible and productive lives in a rapidly changing world. The students will study the many individuals and groups that have contributed to the development of American culture. Insights into the ways American culture has changed and the experiences that have led to these changes will be offered. The impact of industrialization and urbanization on individuals and groups of various times in our history will be described. Students will consider the way changes in American life have affected domestic and foreign policies as well as the impact that decisions made in other countries have had on these policies. By developing a perspective about their past, students will be better able to understand past achievements as well as the possible future goals of their country, something all democratic institutions need to survive.

POLITICAL SCIENCE & ECONOMICS (Grade 11)

This course emphasizes both the practical and the theoretical approach to government and economics. Those concepts which stress understanding and skills important for effective citizen participation in political and economic decision making areas are an integral component of the course. The course will also show the interrelationship of government policies through an examination of both macro and micro economics and an investigation of federal, state, and local institutions.

AP PSYCHOLOGY (Grade 12)

Recommended Prerequisite: Completion of 10th and 11th grade social studies, attaining a final grade of a "B" at least one year.
Also, prospective students need to have completed one College Prep English course, attaining a final grade of at least a "B.
AP Psychology is a comprehensive study of the human mind and cognitive processes. Students will examine the many structures of the brain and their involvement in human action and social interaction. The class will provide a rigorous examination of cognitive development, perception, comprehension, consciousness, memory, intelligence, learning and abnormal psychology. The course will also involve an analysis of mental disorders and their treatments. AP Psychology is an intense and enlightening journey through the depths of the human mind. AP Psychology includes a rigorous reading schedule and ample at home preparation. The course will culminate with the AP exam; a comprehensive evaluation of information throughout the duration of the class. AP Psychology will provide students with an opportunity to gain valuable college credits while still attending high school.

SOCIAL STUDIES SURVEY (Grade 12)

Twelfth grade Social Studies Survey is designed to survey the several social science courses studied during the academic career at Mercer High School. In addition, students will be encouraged to undertake challenging assignments that delve deep into the specific content areas of the social studies. Through rigorous study and application, students will eventually emerge from the course prepared to be productive citizens in the country and in the world.

ADVANCED GOVERNMENT (Grade 12)

Recommended Prerequisite: A final grade in POD of "A-" or better; completion of CPE 10 or CPE 11 course with a final grade of "B". The course provides an analytical perspective of government and its role in U.S. history. This course involves both the study of general concepts used to interpret United States politics and the analysis of specific case studies of current and past government action. In addition, the analysis of government will include a close study of various parts of United States history through the use of historical documents and Supreme Court cases. Students are encouraged to develop their skills in historical analysis and written expression as they study the major components of government and their relationship to events in history. Completion of this course fosters student insight and understanding of governmental principles and practices.

SCIENCE

BIOLOGY (Grade 9)

The biology course is designed to give students an understanding of the activities necessary for maintaining life, and how these organisms changed or evolve over time. The end of the course is tied together with a discussion of ecological relationships and the interconnectedness of all organisms. Major topics in this course include: basic chemistry and water properties, cell components and functions, photosynthesis, cellular respiration, genetics, evolution and ecology.

PHYSICAL SCIENCE (Grade 10)

Recommend Prerequisite: Biology

Physical science is designed as a survey of the physical sciences. The survey includes a general introduction to chemistry and physics. Major emphasis is placed on the basic principles and laws of the physical world.

PHYSICS (Grades 11 & 12)

Recommended Prerequisite: Completion of Academic Chemistry. Students should also be enrolled in Alg. III/Trig. or Pre-Calculus.

Physics is an in-depth study in the fields of mechanics, heat, sound, and light. An overview of electrical circuits is also presented. Most topics are covered with an emphasis on mathematics. A variety of laboratory experiments are used to demonstrate the principles discussed during class periods.

ACADEMIC CHEMISTRY (Grade 10, 11 & 12)

Recommended Prerequisites: Completion of Biology and Algebra I

Chemistry is a course designed for students considering college. It will focus on the facts, formulas, principles, critical-thinking and problem-solving skills. Through the laboratory experience, the concepts and principles will be reinforced and put into practical use. The goal of this course is for students to master the concepts and skills essential to a successful future in the science of chemistry.

AP CHEMISTRY (Grade 11 & 12)

Recommended Prerequisites: Algebra II or Geometry as well as Academic Chemistry

AP Chemistry is open to students who have demonstrated an interest and an aptitude for the science of chemistry. AP Chemistry is based on the College Board's curriculum, and is the equivalent of a first-year college Chemistry course. This is an academic, quantitative chemistry course that is designed to help students gain a depth of understanding of fundamentals and a reasonable competence dealing with chemical problems. AP Chemistry is the study of atoms and molecules and how they interact according to physical laws. Such study is applicable to your everyday life and this will be demonstrated repeatedly throughout the year. The course will cover topics such as modern atomic theory, molecular bonding and hybridization theories, organic chemistry, stoichiometry, thermodynamics, kinetics, equilibrium, reduction and oxidation, electrochemistry, nuclear and descriptive chemistry. All topics will have a strong emphasis on chemical calculations. In addition, a rigorous laboratory component supplementing all lecture topics must be completed as part of the course requirements. Students are permitted to take the AP Chemistry Exam at the conclusion of the course.

GENERAL SCIENCE (Grade 11 & 12)

General Science is designed to give students a survey of and reemphasize the key concepts from each of the science courses offered in grades 7-10, while offering the student the opportunity to increase knowledge and insight into these areas. A comprehensive survey is undertaken with the following subjects: Life Processes, Heredity and Evolution, Earth's Resources, Restless Earth, Matter and Atoms, and the Interaction of Matter. The program strives to make students aware of the influences of the sciences on their daily lives and careers.

STEM SCIENCE (Grade 11 & 12)

Recommend Prerequisites: Successful completion of any two (different) high school science courses.
STEM science is an application based course in which scientific and engineering concepts are coupled with real-world situations. It focuses in the application of Science, Technology, Engineering and Mathematics in order to solve various problems in practical ways.

ANATOMY & PHYSIOLOGY (Grade 11 & 12)

This course meets every school day and covers the study of human anatomy and physiology. It is a college-level course and is highly recommended for any academic junior or senior who is considering a health-related career. The course is also open to academic juniors and seniors who simply enjoy learning about the structure and function of the human body.

ADVANCED BIOLOGY (Grade 11 & 12)

Recommend Prequisites: Academic Chemistry. Recommended 'B' or higher in Biology.
The first semester of Advanced Biology reviews many of the same topics from 9th grade, but in much greater detail and at a more rigorous pace. Revisited topics will include: cell structure and function, photosynthesis, cellular respiration, genetics and evolution. These topics comprise the core of most college biology courses.
New concepts will include a biochemical focus on some of the reactions that happen inside the cells. Math will be used to solve high-level genetic crosses (instead of Punnett Squares). There will also be a large focus on modern DNA technology and laboratory techniques. Students will perform labs simulating DNA profiling (used in criminal investigations) and paternity testing through gel electrophoresis, gene cloning through a process called PCR, as well as creating recombinant bacteria containing jellyfish genes. Students will learn aseptic techniques to successfully culture pure bacterial cultures.
This course is recommended for anyone wishing to enter criminology or a science or medical-related field of study in college.

MATHEMATICS

ALGEBRA I (Grade 9, 10, & 11)

Algebra I presents a balance of new and traditional mathematics in an informal setting. Formulas, equations, problems, functional relations, graphs, and amplified algebraic technique are the immediate objectives. Students who passed pre-Algebra in seventh grade may take this course in eighth grade.

GEOMETRY (Grade 9, 10, & 11)

The goals of geometry are to develop proficiency with geometric skills and to apply the understanding of geometric concepts to real-life situations. This course promotes success, improves logical reasoning, and provides a complete course in high school geometry. Algebraic skills are reviewed and strengthened through application to solving problems in geometry.

ALGEBRA II (Grade 9, 10, 11, & 12)

Algebra II is a balanced course presented in such a manner that it can be mastered by all high school students enrolled in second-year algebra. It is a well-established fact that students entering the second year of algebra do so with varied degrees of understanding of concepts and ability to perform algebraic manipulations. For this reason, some effort is devoted to the review of concepts and skills covered in a first-year course. Algebra II covers not only all of the fundamental concepts of algebra ordinarily studied in the second year, but the basic concepts of trigonometry as well. Students are encouraged to become intelligent and inquiring students who are interested in the "why" as well as the "how" of mathematics. Therefore, in this course a focus will be placed not only in the ability to solve an equation, but also in the reasons for the steps taken in solving it.

ALGEBRA III / TRIGONOMETRY (Grade 10, 11, & 12)

Recommended Prerequisite: Geometry & Algebra II
This course will begin with a review of the algebraic functions which students studied in Algebra I and II. From here students will be introduced to the transcendental exponential, logarithmic and trigonometric functions. The concepts and language of functions will serve as a unifying theme throughout this portion of the course. Students will finish the year studying geometric applications of trigonometry, conic sections, linear algebra, and probability.

PRE-CALCULUS (Grade 10, 11, & 12)

Recommended Prerequisite: Geometry & Algebra II

Pre-calculus is designed to prepare students for success in calculus. The course will begin with a study of polynomial, rational, exponential, logarithmic, and trigonometric functions. Special topics will then be covered including polar coordinates, functions in parametric form, vectors, sequences, and series. Finally, students will be introduced to the fundamental concepts of calculus: the limit, the derivative, and both the definite and indefinite integral. Students enrolling in pre-calculus should be planning to take calculus in either high school or college.

STATISTICS (Grade 11 & 12)

Recommended Prerequisites: Geometry & Algebra II

Statistics is an area of mathematics which is useful in many diverse fields such as the physical, life, and social sciences, engineering, business, and the medical professions. Statistics is a full-year course designed to provide a solid foundation for college-level work. Major areas of focus will be descriptive statistics for both univariate and bivariate data, data collection to include sampling and experimentation, inferential statistics including confidence intervals and hypothesis testing, and probability.

AP CALCULUS (AB) (Grade 11 & 12)

Recommended Prerequisites: Completion of Pre-Calculus with a minimum grade of "B+" or higher.

The AP Calculus course consists of a year of work that is comparable to calculus courses in colleges and universities. It is expected that students who take AP Calculus will seek college credit, college placement, or both, from institutions of higher learning. Topics include functions, graphs, and limits; derivatives (including applications, computation, and behaviors), and integrals (including interpretations, applications, the Fundamental Theorem of Calculus, and techniques of anti-differentiation). All students will be provided the opportunity to take the AP Calculus Exam offered by The College Board.

AP CALCULUS (BC) (Grade 12)

Recommended Prerequisite: AP Calculus AB

AP Calculus BC is for those students who have completed AP Calculus AB and wish to further their calculus education in preparation for the AP Calculus BC exam. The BC exam includes all of the topics covered on the AB exam in addition to the following topics:
Analysis of parametric, polar, and vector functions, Euler's method of numerical integration, Integration by parts, Integration by partial fractions, Improper integrals, Logistic differential equations, & Polynomial approximations and series. All students will be provided the opportunity to take the AP Calculus Exam offered by The College Board.

APPLIED DISCRETE MATHEMATICS (Grade 11 & 12)

Recommended Prerequisites: Algebra II, Geometry

Students in applied discrete mathematics will be introduced to a variety of topics in discrete mathematics which are not typically found elsewhere in the high school math curriculum. All topics will be taught within an applied context. Math topics will include graph theory, game theory, number theory, voting theory, counting techniques, growth and decay, and scale. These will be studied within contexts such as operations research, political science, economics, finance, and science. The overriding theme of the course will be the practicality of mathematics.

FINANCIAL ALGEBRA (Grade 10, 11& 12)

Recommended Prerequisites: Algebra 1, Geometry

Students in Financial Algebra will be intorduced to a variety of topics that combine algebraic and graphical approaches to practical business and personal finance applications. All topics are taught within an applied context. Topics will include personal banking, taxes, car ownership, home ownership, etc. which will be studied in the context of exponential functions - growth and decay, piecewise functions, natural logarithm functions, measures of central tenedency, compound interest, etc. The overall theme of this course will be using mathematics in a practical sense.

HEALTH & PHYSICAL EDUCATION

PHYSICAL EDUCATION (Grade 9, 10, 11, & 12)

Required 9, 10, 11 grade – five days a week for a semester. All students are required to participate and wear regulation uniforms. During students' freshmen year this course is opposite the semester of 9th grade Health. All students are required to wear uniform (White Shirt and Blue shorts or sweats, and proper tennis shoes). Physical education classes are homogeneous with either all girls or all boys in the class. This class is required as a freshman, but can also be taken during the student's sophomore, and junior years to meet the requirements for high school graduation. The following units may be taught during the semester: Badminton, Basketball, Bowling, Cardio Conditioning, Core Training, Dance, Flag Football, Golf, Hybrid Games, Lacrosse, Fitness Testing, Soccer, Team Building, Track and Field, Volleyball, and Weight Lifting. (The PE instructor reserves the right to change the course at any time during the school year to meet the needs of the students and class as a whole.) Evaluation for this course is based on attendance, participation, and attitude.

FITNESS (Grade 10, 11, & 12)

This course meets five days a week for a semester. Students can take back to back semesters and complete their Physical Education requirement over the course of one year. This course is designed for students in grades 10-12 who desire to achieve a high level of fitness in a more competitive atmosphere. Students will experience the following units; Cardio Conditioning, Competitive Game Play, Plyometrics, Strength Training, and Team Sports. Fitness Testing for this course will include, but is not limited to tests of muscular strength, muscular endurance, cardiovascular endurance, flexibility, speed, and reaction time. Evaluation for this course is based on attendance, participation, attitude, and the progress of each student's individual goals for the semester.

AEROBICS (Grade 10, 11, & 12)

This course meets five days a week for a semester. Students can take back to back semesters and complete their Physical Education requirement over the course of one year. This course is designed for students in grades 10-12 who desire to work out several days a week and also experience competitive game play. Units covered include; Cardio Conditioning, Circuit Training, Core Training, Hybrid Games, Interval Training, Weight Training, Yoga, and Zumba. Evaluation for this course is based on attendance, participation, attitude, and the progress of each student's individual goals for the semester.

9th GRADE HEALTH

Health 9 meets five days a week for a semester. This is a homogenous class of either all boys or all girls. This class meets in the semester opposite of the students required physical education class. The class focuses on preparing students to make wise choices regarding their overall health. Information on Mental and Emotional Health, Physical Health, Nutrition, Drug Use, Sexuality, Lifestyle Diseases, and Death and Dying will be discussed throughout the semester. The student will be evaluated through homework, tests, quizzes, projects, and class participation.

11th GRADE HEALTH

Health 11 meets five days a week for a semester. This is a coed class designed to prepare students to make wise choices in regards to their health and well-being as they enter adulthood. The following units are discussed during the course of the semester; Substance Abuse, Human Sexuality, Mental Illness, Lifestyle Disease, Skeletal System, Muscular System, and Nutrition. In each unit, in addition to factual information, students are challenged to think critically and apply factual information. The student will be evaluated through homework, tests, quizzes, projects, and class participation.

ELECTIVE COURSES

JOURNALISM (Grade 9, 10, 11, & 12)

Recommended Prerequisite: Grade of "B" or higher in English class.
Journalism is a full credit course and meets five days a week throughout the year. The course is open to students in grades 9-12 and satisfies a technology credit.
In the print journalism component, students will learn various composition and reporting styles and hone proofreading skills. They will learn to collaborate, revise, and meet deadlines as directed by the instructor and student editors. Students will design

advertisements, create layouts, and edit pictures. Microsoft Publisher and various other programs will be utilized to produce the school newspaper, Hoofbeats. Students will be responsible for several articles with photography and at least one layout per issue.
In the broadcast journalism component, students will learn each step and role in producing a video production. Students will learn storyboarding techniques, filming techniques, and video editing. Various video editing methods and programs will be utilized to generate the diverse types of production projects needed to produce the school newscasts, WMRC.

GRAPHIC ART (YEARBOOK) (Grade 11 & 12)

This course is designed primarily for students who are interested in the preparing the high school yearbook for publication. Students will use computers to design, upload photographs, and write copy to preserve the memories for all students in grades 9-12 for that particular year. Successful students will take the initiative, write well, have a creative eye, and work well with others. Students must receive teacher's signature to take this course.

VOLUNTEER (Grade 12)

Students must spend an appropriate number of hours on community service as contracted with the instructors. Release time from school will be permitted when possible to allow the student opportunity to participate. Journals will be kept by each student and checked by the teacher in order to log hours of service and calculate time spent. The number of credits will be determined by the number of hours spent in community service up to one credit hour. It is the hope that this class by volunteering will not only reward the student participant with school credit but also an attitude of caring, growth in self-esteem, and a sense of community responsibility. Students will also have opportunities to discover and build life skills for careers as well as citizenship.

FOREIGN LANGUAGES

SPANISH I (Grade 9, 10, 11, & 12)

This course is designed to initiate students in the four levels of language learning: speaking, writing, reading, and listening comprehension. The major emphasis will be placed on speaking activities and vocabulary. Spanish culture and customs in Spain, Latin America and other Spanish speaking countries are studied.

SPANISH II (Grade 9, 10, 11, & 12)

Recommended Prerequisite: C or above average in Spanish I.
This is the second of four levels of Spanish. The class will further the development of Spanish grammar, oral conversation, composition skills and vocabulary. Other areas include select Spanish authors, comparison of cultures in the United States, Spain, and Latin America and use of Spanish magazines. Writing skills are reinforced by written compositions on topics related to specific grammar points.

SPANISH III (Grade 10, 11, & 12)

Recommended Prerequisite: C or above average in Spanish II,
Advanced grammar, oral and written composition, communicative activities and the continuation of cultural activities with some emphasis on literature. Spanish magazines and novels are used to stimulate cultural awareness. Emphasis is on Mexico

SPANISH IV (Grade 11 & 12)

Recommended Prerequisite: C or above average in Spanish III.
Advanced Placement - Grammar and literature. This is offered to students who have achieved advanced standing in Spanish. Spanish magazines are again used to stimulate cultural awareness. Students will concentrate their study on the literary works & continue development of levels 1-3. They will improve basic language skills, such as listening, speaking, reading & writing. The course involves assisting elementary students in learning Spanish.

SPANISH V (Grade 12)

The Spanish V course will be a more complete study of Spanish grammar. It will focus on a detailed explanation of the pluscuamperfecto in the subjunctive mood. It will also take a closer look at the subtler uses of the subjunctive. The course examines the nuances of the language, as well as the double meanings of vocabulary words. The Spanish V course will also include much more oral comprehension, reading comprehension, and more complex conversation skills. Students will engage in research designed to enhance their knowledge of people of German heritage who have had an impact on society. Students will engage in reading works by well-known German authors.

FRENCH I (Grade 9, 10, 11, & 12)

French I exposes students to the four areas of reading, writing, speaking, and listening. Vocabulary, oral communication, and French culture will be stressed, while highlighting customs and lifestyles of France and other French-speaking areas.

FRENCH II (Grade 9, 10, 11, & 12)

Recommended Prerequisite: C or above average in French I.
French II is a continuation of reading, writing, speaking, and listening skills, with emphasis on additional French grammar and vocabulary. Cultural awareness of French speaking regions is also continued. Students also study selected French writers.

FRENCH III (Grade 10, 11, & 12)

Recommended Prerequisite: C or above average in French II.
French III further develops speaking, writing, and listening skills to a higher level of competency. In addition, more difficult verb tenses are studied and vocabulary acquisition continues. A French novel is also read and studied in French III.

FRENCH IV (Grade 11 & 12)

Recommended Prerequisite: C or above average in French III.
French IV is an advanced level foreign language class. Fluency in French is highly emphasized. There is a strong focus on French literature as well as the enhancement of previously learned vocabulary and grammar. Overall, students will further improve their reading, writing, speaking and listening skills. More independent projects are required than in French I, II, or III.

FRENCH V (Grade 12)

French V continues to refine reading and listening comprehension as well as grammar skills. However, there will be a heavier emphasis on French speaking fluency. The course will involve studying additional cultural differences and some well-known French authors, both past and contemporary. French V will also use technology in order to conduct research and to experience virtual field trips of francophone places and landmarks.

LATIN OR MANDARIN CHINESE (Grade 9, 10, 11, & 12)

Students will have an opportunity to take a web-based, cyber class through Mercer Area Virtual Academy. These courses must be taken during the school day. It is designed for the student to learn another language and culture.

COMPUTER SCIENCES

COMPUTER SCIENCE ESSENTIALS (Grade 9, 10, 11, & 12)

With emphasis on computational thinking and collaboration, Computer Science Essentials will expose students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. In this year-long course, students will use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python to create usable mobile apps and develop websites, and learn how to make computers work together to put their design into practice. They will apply computational thinking practices, develop their vocabulary, and collaborate the same way that computing professionals do to create products that address topics and problems that are important to them.

Computer Science Principles (Grade 10, 11, & 12)

In this year-long course, students will learn the fundamentals of coding, data processing, data security, and task automation, while learning to contribute to an inclusive, safe, and ethical computing culture. The course will promote computational thinking and coding fundamentals, and introduce computational tools that foster creativity. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems within the course will include app development, visualization of data, cybersecurity, and simulation.

Cybersecurity (Grade 10, 11, & 12)

In this year-long course, students will be introduced to the tools and concepts of cybersecurity in an effort to encourage them to create solutions that will allow people to share computing resources while protecting their individual privacy. Computational resources are vulnerable and frequently attacked across the country. This course will allow students to solve problems and raise their knowledge of and commitment to ethical computing behaviors in an effort to close these vulnerabilities. It also aims to develop the skill of students as consumers, friends, citizens, and employees who can effectively contribute to their communities with a dependable cyber-infrastructure that moves and processes information safely and securely.

FAMILY & CONSUMER SCIENCE

ADVANCED FAMILY & CONSUMER SCIENCE (Grade 9, 10, 11, & 12)

The course is an introductory program in the areas of foods and nutrition, kitchen safety and sanitation, craft projects, sewing and design, and serving the community. Two sewing projects which meet teacher specifications are required for each student. Two craft projects will also be completed throughout this course. Crafts and sewing project materials will be the student's responsibility. You can expect to spend about $20 in supplies per project. This course will include nutrition, meal planning and preparation, and proper baking techniques through the use of teacher demonstrations and student lab experiences.

CULINARY ARTS I (Grade 10, 11, & 12)

Recommended Prerequisite: Advanced Family & Consumer Science.

This is a food preparation class based on classroom discussions, demonstrations, and laboratory work. Students study nutrition, meal planning and preparation, special diets, and cultural diversity in food... Students are required to taste all food prepared to broaden their horizons for meal planning. Students must participate in food laboratory exercises, classroom discussions, quizzes, and tests.

CULINARY ARTS II (Grade 11 & 12)

Recommend Prerequisite: Culinary Arts I.

This is an advanced food preparation class with a major emphasis on laboratory work and classroom discussions. Students will study and practice more involved foods work including meats, foreign foods, candies, cookies, cakes, canning, and many other foods. Students will gain experience in the food preparation field.

FAMILIES TODAY - LIVING TODAY (Grade 11 & 12)

The focus of this semester course is preparing students for the challenges they will meet upon graduation from High School. Students will learn many necessary skills including budgeting, job searching, writing a resume, & parenting. Subjects to be covered in this course are financial literacy, child development, careers, & basic life skills.

NATURAL LIVING (Grade 10, 11, & 12)

This course will cover off grid living, homemade beauty products, essential oils basics, herbs & spices, food for wellness, gardening & canning, and from scratch cooking. This course will be heavily based on hands-on exercise & student research.

PRACTICAL ARTS

WOOD TECHNOLOGY I, II, III, IV (Grade 9, 10, 11, & 12)

Prerequisite to take Wood Tech II, III, and IV: A student must have a minimum of a "C" average in Wood Tech I.
Wood Technology is a full year course focusing on the practice of woodworking and design. Each student will have to opportunity to learn the processes involved in designing, creating, and producing finished wood products. Students will use various machines with a strong emphasis on safety. Additionally, students will be learning the skills needed to design a project using computer aided design software (Autodesk Inventor) and CNC programming (MasterCam). A majority of this course will be hands on work in the wood technology lab. Students will complete required projects and personal projects throughout the year. **Course fee will apply according to the selected projects.**

CAD/ROBOTICS (Grade 9, 10, 11, & 12)

Students enrolled in this course will be introduced to computer aided design & the variety of real world applications associated with design. Everything we use on a daily basis from the shoes on your feet to the vehicles we drive all start with a design. Students will have the opportunity to learn design skills and apply them to create unique 3-Dimensional models to solve problems. Designs will be tested by producing prototypes from the 3-D printer, CNC router (computer numeric control), and other machines in the technology lab. The final design challenge for the class will be integrating science, technology, engineering, and math to produce a working robot to compete in a BattleBot competition. Each student in the class will be involved with the entire process of producing a working robot from start to finish. **Project fee may be required.**

MANUFACTURING (Grade 9, 10, 11, & 12)

This course will introduce students to the modern methods of manufacturing products used in our society. Students will have hands on experience to learn manufacturing practices such as engineering and design, automation in manufacturing, business and industry, blueprint reading, safety, quality control, and materials processing. Each student will work collaboratively with their classmates to complete their own manufactured product. See your ideas come to life while learning valuable skills for engineering, and technical careers. **Project fee may be required.**

LEATHER (Grade 9, 10, 11, & 12)

Leather is a branch of industrial arts. In this semester course, the basics of working with leather carving and embellishments will be covered. The students will be able to construct and finish leather projects using a variety of leatherworking tools and stains. Examples of possible projects are hand-tooled belts, key fob, wallets, and other leather kits. During the semester course, the student will be able to design, plan, and construct a leather project.
Students will learn about staining and finishing leather projects. Students will use various methods of stamping and carving leather designs using embossing tools and swivel knives. This course may only be taken once unless teacher approval is provided. **Project fee may be required.**

METALS (Grade 9, 10, 11, & 12)

This is a semester course involving a wide variety of metalworking and industrial practices. The metals course covers the basics of the different types of metal and soldering processes. A study of the methods of construction and fabrication of metal as well as a survey of historical methods of making metal projects will be presented. The course emphasizes on gaining confidence with using metalworking tools. In the class, students will become acquainted with the handling and use of embossing tools, jewelry saws, files, soldering gun, propane torch soldering, and different metals such as copper, tin, brass, nickel-silver, aluminum and steel. Craftsmanship will be stressed while students develop projects such as metal bookmark, sheet metal fabrication, copper wire metalworking, metal embossing, model making, riveting, and soldering. This course may be taken once unless teacher approval is provided. **Project fee may be required.**

ART

FINE ARTS (I, II, III, IV)

Typical Sequence: Fine Arts I (9th Grade), Fine Arts II (10th Grade), Fine Arts III (11th Grade), & Fine Arts IV (12th Grade)

This full year course is designed to enable students to **evolve into artists**. The students will experiment with a variety of media (art tools and materials) as they advance through Fine Arts I, II, III, and IV courses. The students will use media to create their art projects, such as **drawing, painting, sculpture, metal work, ceramics/clay, graphic design, fibers and more**. Each advancement in the Fine Art courses will allow students the freedom to choose different media and subject matter. In Fine Art courses I, II, III, and IV, students will enhance their skills, critical thinking, and techniques in creating artwork for their art portfolio. Throughout the courses students will learn about art history relevant to art projects and art criticism in the form of critiques. Students will experience a lot of different art materials and tools to create a variety of art projects!

The following are the examples of Fine Art projects:

- Drawing—pencil, prisma colored pencils, charcoal, pen & ink and chalk & oil pastels.
- Painting—oil, acrylic, and watercolor paints.
- Printmaking—silkscreen, wood, mono printing, linoleum printing, and plexiglass intaglio.
- Sculpture—clay, plaster, wax, found object and stone.
- Ceramics—vessel forms.
- Metal work—Embossing metals, wire, and jewelry & metals.

STUDIO ART (I, II, III, & IV)

Typical Sequence: Studio Art I (9th Grade), Studio Art II (10th Grade), Studio Art III (11th Grade), & Studio Art IV (12th Grade)

The course is designed for students to use their creativity to make functional art. The students will experiment with different media (art tools and materials) while advancing in Studio Art I, II, III, and IV. The media students will use to create functional artwork are: **pottery, fibers, jewelry & metals, batiking, weaving, Japanese silk painting, papermaking, chip carving, wood burning, stained glass, basketry and more**. Each advancement in the Studio Art courses will allow students the freedom to choose different media and subject matter. In Studio Art courses I, II, III, and IV, students will enhance their skills and techniques in creating functional art. Throughout the courses students will learn about art history and cultural art relevant to the art projects. Students will create a lot of different of art projects using a variety of art materials and tools.

POTTERY & SCULPTURE (Grade 9, 10, 11, & 12)

The semester course is designed for students who have an interest in working with clay. Students will use clay to create functional pottery. Students will create works of art in clay through the processes of hand building techniques such as coiling, slab construction, and wheel throwing. In the clay course students will learn how to apply and implement glazes, wax resist, sgraffito and underglazes. Well thought out forms, designs, and functional uses along with good craftsmanship are emphasized. **Class can be taken in separate semesters or a full year and can continue to take the class throughout high school career.**

DRAWING & PAINTING (Grade 9, 10, 11, & 12)

The course is designed for students who have an interest in learning how to draw. Students will use different media such as pencil, pen, charcoal, chalk pastel, prisma colored pencils, watercolor pencils, contè crayons, and oil pastel to create three-dimensional images. Students will learn how to create basic value and different shading techniques such as stippling, hatching, crosshatching, and texture design. In the drawing course students will learn how to draw from real life and reference material. **Class can be taken in separate semesters or a full year and can continue to take the class throughout high school career.**

MUSIC & PERFORMING ARTS

HISTORY OF BROADWAY MUSICALS (Grade 9, 10, 11, & 12)

The history of Broadway musicals is a non-performance class designed for any student who is interested in learning about the history, development and structure of the American Musical Theater. In this semester course we will focus on both music and texts to explore ways in which the musical builds on existing theatrical traditions, as well as alters and reshapes them. Students will be introduced to musicals through film review and stage production viewings. Once seen, we will analyze each show make connections to history and musical inspiration. Musicals watched and studied in class may include: Show Boat, Oklahoma, Annie Get your Gun, Brigadoon, Guys and Dolls, Singin' in the Rain, My Fair Lady, Music Man, west Side Story, Sound of Music, Hello Dolly!, Grease, The Wiz, Annie, Cats, Phantom of the Opera, Newsies, Hairspray, etc. The goal of the class is to acquire knowledge of the musical, discover the importance of the American Musicals and to gain better knowledge of the evolution and development of this American art form in relation to the historical and social context of America.

THEATER ARTS (Grade 9, 10, 11, & 12)

Recommend Prerequisite: Students interested in enrolling in Theater Arts would audition with the course instructor.

Theater Arts is a full year class designed to provide high school students 9-12 an opportunity to experience quality theater in all aspects. Students will learn, explore, research and discover many attributes in the theater world. Each student will have the opportunity to act, sing, design sets and costumes, direct, stage and create shows that will be performed for children of the elementary school level. All involved in the class will be responsible for the cultural enrichment of children and their families by introducing them to and developing a life-long appreciation for theater. This project based class will also explore types of theater, learn improvisation skills, study plays, and take part in a 10 minute One Act Night in the spring. All aspects of theater will be studied and applied. Each students will be responsible for acting, improve, costume design, advertising strategies, stage design, lights and sound, special effects, and stage managerial responsibilities. Each student will be taught aspects, of Directing, Stage Managing and House Managing. This is a project based class. All students will be expected to work in groups effectively and turn in assignments and final project on time. This class is limited to 25 performers.

CONCERT CHOIR (Grade 9, 10, 11, & 12)

Recommend Prerequisite: Audition & Participation in Chorus

In this course a variety of music is used exposing the student to many types, styles and periods of music appropriate for their ability. Students will acquire knowledge and skills in the use of the basic music vocabulary including terms, signs and symbols of music reading. Solfegge and sight singing will also be introduced. Acceptable choral discipline is required. The class is open to any student interested in a performance-oriented class in choral music. This group prepares music for at least three performances during the school year. Performance participation is required. Students may be invited to join Chamber Choir and Show Choir from this group.

CHAMBER CHOIR (Grade 10, 11, & 12)

Recommend Prerequisite: Audition & Participation in Chorus

Strong singers are invited to participate in the Chamber Choir ensemble that meets 5 days per week. Sight singing is a necessary skill for the audition process, as well as, for the ensemble setting. As a select group of the most talented students in the vocal music program, students will find this course to be musically challenging. This ensemble will perform college and professional PMEA Level IV, V & VI repertoire from a variety of music periods. This course will be presented using a more rigorous approach to learning music and align with 21st Century Learning Skills. Students will work on developing mastery of their voice both musically and technically. Proper vocal health will be emphasized. Students will work to be able to sing in 4 to 8 parts and should be able to sing a cappella. Attendance at all performances throughout the school year is required and additional performances are to be expected.

ADVANCED CHAMBER CHOIR (Grade 10, 11, & 12)

Recommend Prerequisite: Audition & Participation in Chorus

Strong singers are invited to participate in the Chamber Choir ensemble that meets 5 days per week. Sight singing is a necessary skill for the audition process, as well as, for the ensemble setting. As a select group of the most talented students in the vocal music program, students will find this course to be musically challenging. This ensemble will perform college and professional PMEA Level IV, V & VI repertoire from a variety of music periods. This course will be presented using a more rigorous approach to learning music and align with 21st Century Learning Skills. Students will work on developing mastery of their voice both musically and technically.

Proper vocal health will be emphasized. Students will work to be able to sing in 4 to 8 parts and should be able to sing a cappella. Attendance at all performances throughout the school year is required & additional performances are to be expected. In addition, students will be expected to audition for and/or participate in Honors Chorus auditions. In addition to all the Chamber Choir Prerequisites, the Advanced Chamber Choir Students will be required to audition for Honors Chorus at Westminster College in the fall. Each student will be required to perform the Star Spangled Banner at local events & participate in County Chorus. Addition, the vocal student will be asked to write a 5-page research paper on either a composer or genre of music. Solos at concerts & recitals will be mandatory & each student must attend 2 collegiate performances each semester & write a brief Summary of the performance & experience. It is recommended that the students expand their vocal ability by taking private vocal lessons at a college or music studio.

CONCERT BAND (Grade 9, 10, 11, & 12)

Recommend Prerequisite: Successfully completion of Middle School Band and Audition by the Director of Bands.
Students are instructed on ensemble and individual instrumental technique through daily rehearsals. Students are encouraged to explore a variety of musical styles as an ensemble and through solo performance. Advanced musicians have the opportunity to participate in County, District Honors, District, Regional, and State Band Festivals. The ensemble meets five days per week. This ensemble performs several concerts per year, and attendance at all concerts is required. Students have the opportunity to audition for extra-curricular bands (marching, pep, jazz and honors ensemble), and the students may enroll in a specialized private lesson program. Students in grade 9 who excel at their primary instrument or have competency on a secondary instrument may enroll with approval of the director.

WIND ENSEMBLE (Grades 9, 10, 11, & 12)

Recommend Prerequisite: Audition by the Director of Bands.
This full year Senior High Wind Ensemble class is open to instrumentalists in grades 9 thru 12 who want to further their study of instrumental music, and develop their personal musicianship through an extensive exposure to significant compositions for the wind band. Members of High School Wind Ensemble are introduced to various styles and forms of advanced band literature. Contemporary compositions, standard band works, marches, symphonic jazz arrangements and orchestral transcriptions will be performed at the grade 4 & 5 difficulty level. All Wind Ensemble members are required to review material covered in rehearsal and prepare new material as it is assigned. It is strongly recommended that wind ensemble members review and prepare music at least twice during the week and twice on the weekends. Parts will be assigned based upon the student's performance of a select piece of solo literature. Wind Ensemble members will be asked to perform and record selected music examples on to an audio cassette for evaluation purposes. All Wind Ensemble members are required to complete 3 intonation charts per quarter. Wind Ensemble members who require tutoring are encouraged to enroll in a private lesson program through the school, an area college or university, or an area music store. Members are required to participate in four concerts and attend several after-school rehearsals and sectionals during the school year. Members of the Wind Ensemble are required to wear the predetermined concert attire.

ADVANCED WIND ENSEMBLE (Grade 10, 11, & 12)

Recommend Prerequisite: Audition by the Director of Bands
Advanced Senior High Wind Ensemble is a full-year class open to instrumentalists who want to further their study of instrumental music, expand their personal musicianship through an extensive exposure to significant compositions for the wind band, and begin their development as an instrumental soloist and chamber music performer. Members of Advanced High School Wind Ensemble are introduced to various styles and forms of advanced band literature. Contemporary compositions, standard band works, marches, symphonic jazz arrangements and orchestral transcriptions will be performed at the grade 4 & 5 difficulty level. All Wind Ensemble members are required to review material covered in rehearsal and prepare new material as it is assigned. It is strongly recommended that wind ensemble members review and prepare music at least twice during the week and twice on the weekends. Parts will be assigned based upon the student's performance of a select piece of solo literature. Wind Ensemble members will be asked to perform and record selected music examples for evaluation purposes. All Wind Ensemble members are required to complete 4 intonation charts per quarter. It is strongly recommended that Wind Ensemble members enroll in a private lesson program through the school, an area college or university, or an area music store. Members are required to participate in four concerts and attend several after-school rehearsals and sectionals during the school year. Members of the Wind Ensemble are required to wear the predetermined concert attire. In addition to the concert performance, music testing, daily rehearsal evaluation, and auditions, Wind Ensemble members must meet the following requirements:

- Mandatory Audition at PMEA district 5 Honors Band (1st semester)
- Attendance at two university/collegiate or professional instrumental music concerts
- Perform at a student recital as a soloist or chamber group (2nd semester)
- Four to five page research paper on a composer of their choosing with director approval

MUSIC THEORY, ANALYSIS, & SKILLS (Grade 9, 10, 11, & 12)

This full-year course is designed for students with little to no previous music theory experience. Each student will learn the basic vocabulary of music, how to read and notate basic rhythms and melodies, identify notes and rhythms, analyze relationships between pairs of notes, analyze chords and their structure, and create compositions utilizing the skills obtained throughout the course. Each student will also be trained in aural skills such as rhythmic and melodic transcription, interval and chordal analysis, and sight-singing. The goal of this course is to develop each student's musical knowledge and skills in order to improve overall musicianship and, if applicable, prepare them for undergraduate study of music.

BASIC GUITAR (Grade 9, 10, 11, & 12)

In this semester course you will receive new knowledge of an instrument, the Guitar, and an overall appreciation for the art of music. Objectives for the class include: Playing a variety of music alone/in groups, Guitar care expectations, and the required packet that is used as our text to learn strings of the guitar, Playing chosen guitar literature, Learning the anatomy of the guitar, Overall knowledge of strings and parts of the guitar, Learn notes on the strings, Playing exercises for each of the strings, Playing each song for a grade, Learning basic chords and playing chord songs, and Music Reading will be taught with note recognition and identification. This class is limited to 20 players.

UKULELE (Grade 9, 10, 11, & 12)

This semester course will give students a chance to explore the wonderful world of music through listening, playing and composing. This class will be a performance based class and will require daily practice. We will learn about instrument care, ukuleles, sound, matching pitch, and most importantly we will learn how to play the baritone ukulele. Students will be introduced to a variety of music both traditional and contemporary. The students will also learn musical notation, music history, rhythmic dictation and playing skills. This class is limited to 10 players.

Mercer Area School District Virtual Academy
2023-2024

Our Courses

The courses offered through the Mercer Area School District Virtual Academy will equip students with an essential base knowledge. Though the classroom is virtual, the course framework utilizes specific textbooks. The courses listed in this section are designed to provide students with engaging content, assignments, and assessments. Weekly lesson modules include reading assignments supported by short answer assessments, essay questions, quizzes, and traditional homework assignments. Courses are also supplemented with a wealth of web-based resources including: video, interactive animations, supplemental materials from textbook publishers, and a wide range of other engaging educational media.

Standards Aligned Instruction

All courses are developed to meet state standards and the Common Core Standards. As a result, each student experiences a rich, deep understanding of the content that is applicable to both local and state assessments.

Assessments

Rigorous assessment and performance tracking are provided for all students through the courses themselves and our learning management system. All courses contain a consistent framework of assignments that include a well-balanced set of assessments designed to give teachers direct insight into a student's understanding of content. Assessments vary to give all students an opportunity to demonstrate mastery. Courses contain weekly modules and may include:

- E-Essays - Students answer short essay questions.
- E-Short Answers - Students provide hand-written short answers to topic-relevant questions.
- E-Assignments - A series of portfolio assignments developed from textbooks and textbook publishers' resources.
- E-Vocabulary - Students research and define terms related to the topic of study
- E-Quizzes and Tests - Rigorous multiple-choice, true/false, and other question types are provided at regular intervals within each course. Math assessments require students to show their work, further indicating mastery of concepts and procedures.
- E-Projects - Many courses also include project assessments requiring student research, planning and organization, adherence to formats and persuasive writing capabilities.

Grading

All courses offered through the Mercer Area School District Virtual Academy adhere to the same grading guidelines as students at Mercer Middle-High School.

Homeroom

Each morning (Monday through Friday), students are required to sign into a live Homeroom class session at a specified time. During this time the student meets directly with a teacher. It is during this homeroom session that Mercer Area Virtual Academy attendance will be monitored.

Drop/Add Parameters

Students taking classes through the Mercer Area School District Virtual Academy adhere to the same drop/add policy as students at Mercer Middle-High School. Typically, changes can be made during the first two weeks of the year for a full-year course and first two weeks of the semester for a half-year course. Students will not be able to change their schedules unless otherwise approved by the Virtual Academy Coordinator.

MERCER AREA VIRTUAL ACADEMY COURSE CREDITS

Credits shall be based on meeting days with the following standards in effect.

Year-Long Courses

1 day/week..... 0.2
2 days/week..... 0.4
3 days/week..... 0.6
4 days/week..... 0.8
5 days/week..... 1.0

Semester Courses

2 days/week..... 0.2
3 days/week..... 0.3
4 days/week..... 0.4
5 days/week..... 0.5

COURSE CREDITS (Grades 9-12)

Accounting I (Gr. 9-12)..... 1.0
Algebra I (Gr. 9-12)..... 1.0
Algebra II (Gr. 9-12)..... 1.0
Algebra III/Trig. (Gr. 10-12)..... 1.0
American History (Gr. 10)..... 1.0
AP Biology (Gr. 12)..... 1.2
AP Calculus (AB) (Gr. 11, 12)..... 1.0
AP Calculus (BC) (Gr. 12)..... 1.0
AP Chemistry (Gr. 12)..... 1.2
AP English (Gr. 12)..... 1.0
AP Environ. Science (Gr. 11, 12)..... 1.0
AP European History (Gr. 11, 12)..... 1.0
AP Human Geography (Gr. 11, 12).. 1.0
AP Physics (Gr. 12)..... 1.2
AP Psychology (Gr. 12) 1.0
AP US Govt. & Politics (Gr. 12)..... 1.0
AP US History (Gr. 11, 12)..... 1.0
AP World History (Gr. 11,12)..... 1.0
Art History (Gr. 9-12)..... 1.0
Astronomy I (Gr. 9-12)..... 0.5
Astronomy II (Gr. 9-12)..... 0.5
Biology (Gr. 9)..... 1.0
Bus. & Personal Law (Gr. 9-12)..... 1.0
Business Math (Gr. 11-12)..... 1.0
Chemistry (Gr. 10-12)..... 1.0
College Prep English (Gr. 9-12)..... 1.0
Computer Essentials (Gr. 9-12)... 1.0

Creative Writing (Gr. 9-12)..... 0.5
English (Gr. 9-12)..... 1.0
Environmental Science (Gr. 11, 12) 1.0
Food & Nutrition (Gr. 10-12)..... 1.0
French I (Gr. 9-12)..... 1.0
French II (Gr. 9-12)..... 1.0
Geometry (Gr. 9-12)..... 1.0
Health I (Gr. 9)..... 0.5
Health II (Gr. 11-12)..... 0.5
Journalism (Gr. 9-12)..... 1.0
Keystone Alg. I Prep (Gr. 9-11)..... 1.0
Keystone Biology Prep (Gr.9-11)..... 1.0
Keystone Lit. Prep (Gr. 10, 11)..... 1.0
Latin I (Gr. 9-12)..... 1.0
Latin II (Gr. 10-12)..... 1.0
Mandarin Chinese I (Gr. 9-12)..... 1.0
Mandarin Chinese II (Gr. 10-12)..... 1.0
Marketing (Gr. 9-12)..... 1.0
Music History (Gr. 9-12)..... 0.5
Mythology (Gr. 10-12)..... 0.5
PA Driver's Education (Gr. 9-12)..... 0.5
Parenting Skills (Gr. 11-12)..... 0.5
Pers. Finance & Literacy (Gr. 9-12)...1.0
POD/Economics (Gr. 11)..... 1.0
Psychology (Gr. 12)..... 0.5
Physical Education (Gr. 9-12)..... 1.0
Physical Science (Gr. 10)..... 1.0
Physics (Gr. 11-12)..... 1.0
Physiology (Gr. 11-12)..... 1.0
Pre-Calculus (Gr. 10-12)..... 1.0
SAT Math Prep (Gr. 10, 11)..... 0.5
Sociology (Gr. 12)..... 0.5
Spanish I (Gr. 9-12)..... 1.0
Spanish II (Gr. 9-12)..... 1.0
Spanish III (Gr. 10-12)..... 1.0
Statistics (Gr. 11, 12)..... 1.0
World History (Gr. 9)..... 1.0
World Geography (Gr. 9-12)..... 1.0
World Literature (Gr. 11, 12)..... 1.0

Weighted Courses:

1.4 = AP Biology,
AP Calculus (AB),
AP Calculus (BC),
AP Chemistry
AP English,
AP European History,
AP Environmental Science,
AP Human Geography,
AP Physics, AP Psychology,
AP US Gov't & Politics,
AP US History,
AP World History

1.3 = Calculus, Pre-Calculus

1.2 = College Prep English 11/12,
Physics, Physiology,
Spanish III, Statistics,
Trigonometry

1.1 = French II, Spanish II,
Latin II, Chinese II

Course Descriptions 2023-2024
Mercer Area Virtual Academy

English Language Arts

7th Grade Reading (Mercer Customized Course) Length: Full Year

Required of all 7th Grade Students

Reading in seventh grade is designed to get students engaged and become active readers when reading any type of text. Whether it is a paperback or a content area textbook, students will learn strategies for maximizing their learning in the reading experience. This will help prepare our students for high school and support our students in their efforts to meet the PA academic standards. Writing, speaking, and presenting as ways of responding to reading, will also be a major component of class. Seventh grade reading will be taught thematically with intense collaboration in combined units with the English course. Activities and topics will include drama, Literature Circles, genre studies, interdisciplinary projects, poetry, and public speaking presentation skills.

7th Grade English (Mercer Customized Course) Length: Full Year

Required of all 7th Grade Students

English in seventh grade is designed to provide students with the skills necessary to respond to literature, compose letters, develop the use of proper grammar and mechanics when writing, develop the skills necessary to complete research reports, and learn how to work through the writing process. Through daily and long-term assignments, students build and expand their understanding of writing as a process that includes note taking, drafting, revising, editing, and publishing. Introduction in the structure and styling of sentences, paragraphs, and essays is emphasized. Students learn to write creatively and expressively, but also to plan before writing, showing awareness of purpose, audience, content, and form. Oral communication skills are strengthened through the reading and evaluation of student's writing; including self, peer, and teacher evaluation. Main focus will be directed towards *Types of Writing, Quality of Writing, Characteristics and Functions of the English Language, and Research*.

8th Grade Reading (Mercer Customized Course) Length: Full Year

Required of all 8th Grade Students

The primary focus of this eighth grade Reading course is to emphasize student reading skills. Multiple novels and short stories will be analyzed in this course. Text-dependent analysis and reading for understanding are a prime focus throughout the curriculum. Reading in eighth grade is designed to prepare our students for high school and support our students in their efforts to meet the PA Academic Standards and topics will include drama, Literature Circles, genre studies, interdisciplinary projects, and poetry. Writing will be integrated in conjunction with the English course.

8th Grade English (Mercer Customized Course) Length: Full Year

Required of all 8th Grade Students

Eighth grade English is designed to provide students with the skills necessary to respond to literature, compose letters, develop the use of proper grammar and mechanics when writing, develop the skills necessary to complete research reports and learn how to work through the five steps of the writing process. In this course, students will work through major units that are directly related to their reading and history courses. The course is broken down into seven main areas of study: *Essay Writing, Letter Writing, Grammar, Research, Short Stories and Narratives, Poetry, and Newspaper*. While examining these seven main areas, special attention will be given towards vocabulary and reading for understanding skills.

9th Grade General English Length: Full Year

This course consists of developing and improving skills in grammar, composition, speech, and literature. Parts of speech, parts of the sentence, verbal usage, and agreement are stressed. This knowledge is then applied by writing book reports and journals. There is weekly testing on the provided spelling tests. Three novels, many short stories, and Shakespearian drama are included in the curriculum. Various speaking skills are also developed through speeches, book reports, and class participation.

9th Grade College Preparation English (Mercer Customized Course) Length: Full Year

This course consists of developing and improving skills in grammar, composition, speech, and literature. Parts of speech, parts of the sentence, verbal usage, and agreement are stressed. This knowledge is then applied by writing sentences and paragraphs. Other writing exercises include book reports, journals, and a research paper. There is weekly testing on the provided spelling and vocabulary lists. One novel, many short stories, Shakespearian drama, and poetry are included in the curriculum.

10th Grade General English (Mercer Customized Course) Length: Full Year

Tenth grade general English places great emphasis on usage, literature, creative writing, and life skills. Students receive extensive exposure to the elements of standard usage, including writing complete sentences, agreement, and mechanics. Grammar is limited to a three-week overview in the first semester. Students are exposed to sophomore level integrated vocabulary and spelling words appearing in literature units. These words are assimilated into oral and written work. Process writing, including paragraphs and literature-based essays, is an important part of the curriculum. The balance of the school year is spent on usage and vocabulary skills in oral communication and in reading. The students are given extensive exposure to several literary genres. This broad literary exposure is designed to create student interest, stimulate creative writing and student discussion, and cultivate student understanding of what is read. Listening skills, effective note taking techniques, and a unit on job hunting, are also integrated into the course.

10th Grade College Preparation English (Mercer Customized Course) Length: Full Year

Students will work with grammar, writing, vocabulary, speeches, and literature. In grammar, they will use Warriner's English Grammar and Composition and learn about grammar as it relates to writing. Students will be responsible for writing a research paper in which they will back their opinions with facts gathered from a variety of sources. They will also work extensively on paragraphs, essays, journals, book reports, and creative writing. Vocabulary will be from E.D. Hirsh's Dictionary of Cultural Literacy and will emphasize learning words in context. Literature will be studies in genre including poetry, drama, short stories, and novels. Students will use Adventures in Appreciation and various other classic works. Critical thinking skills will be stressed throughout the course as will creativity.

11th Grade General English (Mercer Customized Course) Length: Full Year

There are three major divisions of English for juniors: grammar, composition, and communications; American literature; and vocabulary. In grammar, composition, and communications, students are required to study the parts of speech, sentence structuring, and writing, as well as delivery of speeches. Journal assignments are given weekly. In American literature students are exposed to the beginnings of American literature and to various genre, such as chronicles, short stories, essays, novels, and dramas. A few of the works included are Hiroshima, To Kill a Mockingbird, Of Mice and Men, The Pigman, The Pearl, and Inherit the Wind. Vocabulary words are taken from various reading assignments, magazines, and texts. Students are required to spell and define the words given.

11th Grade College Preparation English (Mercer Customized Course) Length: Full Year

This course will have five main areas of focus: *composition, vocabulary, American literature, usage, and personal awareness*. Composition – Students express themselves in clear, direct, concise, and creative writings through the means of journals, essays, and poetry. Vocabulary – Students can isolate and identify specific Latin and Greek prefixes, roots, and suffixes. American Literature – Students can explain the influence of American history on American literature and vice versa. Usage – Students demonstrate their command of contemporary usage in both spoken and written English. Personal Awareness – Students develop an ability to judge and evaluate what the media present

12th Grade General English Length: Full Year

Students in this course study important British literature, including: *Beowulf, Macbeth* and *Gulliver's Travels*, as well as read poignant examples of writing from literary schools such as Romanticism and the Victorians. There is a strong emphasis on writing throughout the course, which culminates with an extensive research paper.

12th Grade College Preparation English (Mercer Customized Course) Length: Full Year

College preparation English is for the more advanced student who intends to continue education at a two- or four year institution. However, a grammar emphasis is placed on literature interpretation and writing. In addition to weekly vocabulary tests, grammar review, and an intensive study of British literature, the student is responsible for three typed writing assignments, two critical analyses and one research paper.

AP English Literature and Composition Length: Full Year

This college-level course helps students hone their critical literacy analysis skills. Through intensive reading assignments, students explore language, character, action, and theme. Students also write compositions representing a variety of genres, including literary analysis, exposition, argument, narrative, and creative writing. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP English Literature and Composition Exam.

Math

Pre-Algebra 7 (Mercer Customized Course) Length: Full Year

Open to Grades: 7

This course is designed to introduce students to the foundations of algebra and prepare students for future algebra courses. Pre-Algebra A will cover the first half of the full year Pre-Algebra content. Students must then take Pre-Algebra B the following year.

Pre-Algebra 8 (Mercer Customized Course) Length: Full Year

Open to Grades: 8

This course is designed to continue the curriculum that was introduced in Pre-Algebra A. The course is to strengthen students in the foundations of algebra and prepare students to take Algebra I the following year. Pre-Algebra B will cover the second half of the full year Pre-Algebra content.

Pre-Algebra (Mercer Customized Course) Length: Full Year

Open to Grades: 7 & 8

This course is the first formal introduction to the concepts and language of algebra. Students become familiar with positive and negative rational numbers, proportions and how those numbers relate to each other through various algebraic operations. These skills form a foundation that will help students in later math and science courses.

Algebra I (Mercer Customized Course) Length: Full Year

Open to Grades: 7, 8, 9, 10, 11, & 12

Special Notes: ***If taking in Grades 7 or 8, student must have passed Pre-Algebra prior to enrolling in Algebra I***

At this level, students study the existence of patterns within mathematical models and display them graphically. They examine varying rates of change and the impact of a changing variable on an algebraic expression. These skills will be used to perform various mathematical operations on polynomial expressions. This course is designed to prepare students to sit for the Algebra I Keystone.

Geometry (Mercer Customized Course) Length: Full Year

Open to Grades: 8, 9, 10, 11, & 12

Special Notes: ***It is required that the student complete Algebra I prior to enrolling in Geometry.***

The goals of geometry are to develop proficiency with geometric skills and to apply the understanding of geometric concepts to real-life situations. This course promotes success, improves logical reasoning, and provides a complete course in high school geometry. Algebraic skills are reviewed and strengthened through application to solving problems in geometry.

Algebra II (Mercer Customized Course) Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***It is recommended that the student pass Geometry before enrolling in Algebra II.***

As a continuation of skills learned in Algebra I, students now focus on evaluating and solving algebraic, quadratic, exponential and logarithmic expressions. These concepts will be integrated into mathematical and geometric models involving series and sequences. Students study these models through a combination of systems of equations and graphing.

Algebra III/Trigonometry (Mercer Customized Course) Length: Full Year

Open to Grades: 10, 11, & 12

Special Notes: ***It is recommended that the student pass Algebra II before enrolling in Trigonometry.***

This course will begin with a review of the algebraic functions which students studied in Algebra I and Algebra II. From here students will be introduced to the transcendental exponential, logarithmic and trigonometric functions. The concepts and language of functions will serve as a unifying theme throughout this portion of the course. Students will finish the year studying geometric applications of trigonometry, conic sections, linear algebra, and probability.

Pre-Calculus (Mercer Customized Course) Length: Full Year

Open to Grades: 10, 11, & 12

Special Notes: ***It is recommended that the student pass Algebra II before enrolling in Pre-Calculus.***

Pre-calculus is designed to prepare students for success in calculus. The course will begin with a study of polynomial, rational, exponential, logarithmic, and trigonometric functions. Special topics will then be covered including polar coordinates, functions in parametric form, vectors, sequences, and series. Finally, students will be introduced to the fundamental concepts of calculus: the limit, the derivative, and both the definite and indefinite integral. Students enrolling in pre-calculus should be planning to take calculus in either high school or college.

Probability & Statistics Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***It is recommended that the student pass Algebra II before enrolling in Probability & Statistics.***

This course introduces students to sampling methods, descriptive statistics and probability distributions. Students learn how to take effective samples and create valid experiments. They acquire tools and knowledge that will enable them to effectively evaluate and interpret data.

AP Calculus AB Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***It is recommended that the student earn at least a 'B" in Calculus before enrolling in AP Calculus AB.***

This college-level course addresses such topics as elementary functions, properties of functions and their graphs, limits and continuity, differential calculus and integral calculus. Students are expected to work with functions graphically, numerically, and analytically. Challenging and engaging assignments reinforce content. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Calculus AB Exam.

AP Calculus BC Length: Full Year

Open to Grades: 12

Special Notes: ***It is recommended that the student earn at least a "B" in AP Calculus before enrolling in AP Calculus BC***

This college-level course focuses on the calculus of functions of a single variable. Students will build upon topics taught in Calculus AB, including but not limited to limits, derivatives, integrals, and approximation. Throughout the course, emphasis is placed on using multiple representations by expressing concepts graphically, numerically, analytically, and verbally. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Calculus BC Exam.

Science

Earth Science Length: Full Year

****Required of all 7th Grade Students***

In their study of Earth Science, students learn about Earth's materials and the changes to its surface and interior, along with the forces that cause those changes. Other topics covered include weather and climate, the ocean and the study of our solar system, galaxies, and the universe.

Life Science Length: Full Year

****Required of all 8th Grade Students***

As part of this course in life science, students study living organisms, the structure and function of the cell, heredity, evolution, viruses, bacteria, plants, animals and how living things interact in the environment.

Biology Length: Full Year

Required of all 9th Grade Students

This biology course includes topics of study such as cell structure and function, photosynthesis, cellular respiration, mitosis and meiosis, genetics and heredity, evolution and ecology and environmental sciences. Students will be able to apply the theory of cell biology to all living organisms. This course is designed to prepare students to sit for the Biology Keystone Exam.

Physical Science Length: Full Year

This course introduces students to important topics in physical science. Students receive an overview of concepts related to chemistry and physics and how these concepts can be applied in real life. Topics covered include matter, atoms, mixtures, energy, forces, temperature, heat, work, electricity, and magnetism

Chemistry Length: Full Year

Open to Grades: 10, 11, & 12

In this class, students are introduced to principles of chemistry and their applications. The course explores general chemistry topics and problem solving skills. Topics covered include: matter and change, measurement, the periodic table, chemical bonding and reactions, stoichiometry and reaction kinetics.

Physics Length: Full Year

Open to Grades: 11 & 12

Special Notes: *It is recommended that the student pass Chemistry before enrolling in Physics*.

Students study algebra-based concepts in this course that emphasize kinematics in one and two dimensions, forces and Newton's Laws of Motion, work and energy, circular motion, momentum and collisions, vibration and waves and electrical energy. They further develop problem-solving skills that can be applied across the sciences.

Environmental Science Length: Full Year

Open to Grades: 11 & 12

Through this environmental science course, students extensively explore biological and ecological topics, including: ecosystems, human populations, biodiversity, renewable and non-renewable resources and waste. They learn how humans impact the environment and about the economics and policies related to environmental issues.

Anatomy and Physiology Length: Full Year

Open to Grades: 11 & 12

This intensive course gives students an overview of human anatomy and physiology. It covers information about the human body at the cellular and chemical levels. Students learn about control and regulation of each of the systems in the human body and how each of the systems applies to disease and development

AP Chemistry Length: Full Year

Open to Grades: 11 & 12

Special Notes: *It is recommended that the student earn at least a 'B" in Chemistry before enrolling in AP Chemistry.*

This college-level course covers such topics as atomic theory and structure, chemical bonding, states of matter and reactions. Challenging and engaging assignments reinforce the content. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Chemistry Exam.

AP Biology Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***It is recommended that the student earn at least a "B" in Biology before enrolling in AP Biology.***

This college-level course focuses on conceptual understanding of four big ideas: 1) The process of evolution drives the diversity and unity of life; 2) Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis; 3) Living systems store, retrieve, transmit, and respond to information essential to life processes; 4) Biological systems interact, and these systems and their interactions possess complex properties. Challenging and engaging assignments reinforce the content. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Biology Exam.

AP Environmental Science Length: Full Year

Open to Grades: 11 & 12

This college-level course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students will identify and analyze environmental problems that are both natural and human-made. They will evaluate the risks associated with these problems and examine alternative solutions to addressing them. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Environmental Science Exam.

AP Physics I: Algebra Based Length: Full Year

Open to Grades: 11 & 12

This college-level course is an algebra-based, introductory physics course. Students explore topics such as Newtonian mechanics, rotational motion, work, energy, power, mechanical waves, sound, and an introduction to circuits. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Physics I Algebra-based Exam

AP Physics 2: Algebra Based Length: Full Year

Open to Grades: 12

This college-level course is an algebra-based, introductory physics course. Students explore topics such as fluid statics and dynamics; thermodynamics with kinetic theory; PV diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic, and nuclear physics. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Physics II Algebra-based Exam.

Social Studies

Ancient World History (Mercer Customized Course) Length: Full Year

****Required of all 7th Grade Students***

This course is designed to be an introductory study of world cultures. The students will be able to see that their culture has been affected by the other cultures of the world. As citizens of the global village, the students will recognize the interdependence of all the nations of the world. They will see that cultural borrowing takes place on a continual basis. They will understand that while there are diversities, there are fundamental similarities in basic human activities and aspirations of all people. The five themes of geography and other geographic concepts will be incorporated in a specific unit and throughout the course. A detailed examination of ancient civilizations spans the course from Mesopotamia to the Byzantine Empire.

American History 8 (Mercer Customized Course) Length: Full Year

Required of all 8th Grade Students

American History provides middle school students with background that is meaningful to young people in the 2000's and provides the history of all Americans, including Black Americans, the Native Americans and all other ethnic and minority groups. Throughout there is an emphasis on the values and ideas that have guided and shaped the American nation. The achievements and failures in establishing and strengthening these values and ideals are presented as a central part of the students' understanding of the nation's past. The five themes of geography and other geographic concepts will be incorporated in a specific unit and throughout the course.

World History 9 (Mercer Customized Course) Length: Full Year

Required of all 9th Grade Students

The "modern" period of world history began in approximately A.D. 1450, when much of Europe emerged from the feudalism of the Middle Ages and modern ways of life began. Our study begins with a review of the great civilizations which contributed to modern Western Civilization, and includes a brief study of the medieval period. Study will then progress to the changes which occurred that led to our modern world. Time periods studied include: the Renaissance, the Age of Exploration, the Commercial Revolution, the Reformation, the Age of Absolute Monarchs, the Scientific Revolution, the Enlightenment, the Age of Revolution in England and America, the French Revolution, the Industrial Revolution, the rise of Nationalism, the Age of Imperialism, and concludes with a study of World War I and World War II. Students should gain an understanding of how and why the events which transpired in the time periods above shaped our modern world.

American History 10 (Mercer Customized Course) Length: Full Year

Required of all 10th Grade Students

The American History describes the history of the American people from the 1800's to the present. By acquainting students with their past, they will be better prepared to live responsible and productive lives in a rapidly changing world. The students will study the many individuals and groups that have contributed to the development of American culture. Insights into the ways American culture has changed and the experiences that have led to these changes will be offered. The impact of industrialization and urbanization on individuals and groups of various times in our history will be described. Students will consider the way changes in American life have affected domestic and foreign policies as well as the impact that decisions made in other countries have had on these policies. By developing a perspective about their past, students will be better able to understand past achievements as well as the possible future goals of their country, something all democratic institutions need to survive.

Problems of Democracy / Economics (Mercer Customized Course) Length: Full Year

Required of all 11th Grade Students

At this level, students achieve a fundamental understanding of core economic principles through a multi-dimensional program. Through text, graphics, videos, and online resources, key concepts are developed and supported by a variety of activities to help students apply their newly-acquired knowledge to the real world. Students will also study critical components of our government system. By examining a variety of primary sources and current events, they will learn about the three branches of government and how each works independently and interdependently.

Psychology Length: Semester

Open to Grades: 12

This introductory psychology course acquaints students with basic principles of psychology. Students learn about how concepts they encounter in the course have real-life applications. The text is supported by online resources, videos, and quizzes.

Sociology Length: Semester

Open to Grades: 12

This sociology course explores the interactions and relationships of the varying groups within society. Students investigate the roles of societies' institutions and the effects of these institutions on different demographics. They also learn about the challenges and problems faced by communities

AP European History Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This college-level course covers European history from the High Renaissance to the present. Topics include important political, economic, religious, social and intellectual developments that occurred in Europe during that time period. Students demonstrate understanding of historical events and themes through a variety of challenging and engaging writing assignments. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP European History Exam.

AP U.S. History Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This college-level course is an intensive study of United States history from 1492 to the present. Students learn how to analyze, evaluate, and interpret historical sources and evidence. This course requires extensive reading, research and writing and meets the rigorous standards of the College Board. It was designed to prepare students to sit for the AP U.S. History Exam.

AP World History Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course***.

This college-level course examines world history over the past thousand years. Students develop a deeper understanding of the evolution and interactions between cultures, regions, and institutions. By concentrating on historical global events, students also explore the impact of changes within an international framework. Challenging and engaging assignments reinforce the content. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP World History Exam.

AP Human Geography Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This college-level course will introduce students to the systematic study of patterns. Aside from interpreting maps and analyzing geospatial data, students will learn to define regions and evaluate the regionalization process, characterize and analyze changing interconnections among places, and understand and explain the implications of associations and networks among phenomena in places. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Human Geography Exam.

AP Psychology Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This college-level course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings. Students are exposed to psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They will also learn about the ethics and methods psychologists use in the science and in practice. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP Psychology Exam.

AP U.S. Government and Politics Length: Full Year

Open to Grades: 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This college-level course will give students an analytical perspective on government and politics in the United States. This course includes both the study of concepts used to interpret U.S. government and politics and the analysis of specific examples. It also requires familiarity with various institutions, groups, beliefs, and ideas that constitute U.S. government and politics. Students will be able to describe and compare concepts and theories pertaining to U.S. government, explain patterns of political process and behaviors, interpret data, and critically analyze relevant theories and concepts. This course meets the rigorous standards of the College Board and was designed to prepare students to sit for the AP U.S. Government and Politics Exam.

Physical Education

Middle School Physical Education Length: Full Year

****Must complete in either 7th or 8th grade***

Middle school students enrolled in this course will learn information which they can use to develop a healthy, active lifestyle. Topics covered include muscle function, cardiovascular fitness, body types, nutrition, weight management, and body systems. The course includes an activity log with an expectation of 90 minutes of documented physical activity per five days of school.

High School Physical Education Length: Full Year

Open to Grades: 9, 10, 11, & 12

High school students acquire a more advanced understanding of health and wellness information that they can utilize to develop healthy attitudes and behavior patterns. Critical thinking and decision-making skills are taught and practiced throughout the course as students are encouraged to recognize their power to choose healthy behaviors to reduce risks. The physical education component includes an activity log with an expectation of at least 90 minutes of documented physical activity per five days of school.

Health

Middle School Health II Length: Semester

Open to Grades: 7

This course reviews topics covered in Middle School Health I and focuses on the effects of substance abuse and different types of diseases. Topics covered include tobacco, alcohol, and other drug abuse, personal health, consumer choices, and communicable and noncommunicable diseases.

Middle School Health III Length: Semester

Open to Grades: 8

In addition to reviewing concepts from Middle School Health I and Middle School Health II, this course will focus on relationships, mental and emotional health, conflict resolution and violence prevention. Topics covered include mental and emotional problems, building healthy relationships and promoting social health.

Health I Length: Semester

****Required course for 9th Grade***

High school students enrolled in this health course focus on three dimensions of human health and development: physical, emotional, and social. They learn how to make good decisions about their health. Topics covered include: nutrition, fitness, drug abuse, mental health and related information.

Health II Length: Semester

Open to Grades: 11 & 12

****Required course***

Students build upon the knowledge they acquired in Health I as they learn more about the three dimensions of human health and development. Topics of study include: different body systems, first aid and safety. Students also gain a deeper understanding of the importance of good decision making as it relates to these topics as well as others.

Foreign Language

French I Length: Full Year

Open to Grades: 8, 9, 10, 11, & 12

Beginning French students are introduced to the basic elements of French as they move through the early stages of language acquisition. They study major vocabulary categories, verb tenses, and other fundamental components of French grammar. The main purpose of the course is to help students communicate in French at a basic level, appreciate the French-speaking world and develop cultural awareness.

French II Length: Full Year

Open to Grades: 9, 10, 11, & 12

French II students review the basic elements of French grammar acquired in French I and then will greatly expand their communicative abilities. The textbook is written entirely in French which helps students advance their knowledge of French grammar, structure, and vocabulary. Their language skills increase so they are able to participate more fully in general conversations, read more sophisticated passages and write with a firmer command of syntactical structures. Cultural awareness is also further developed.

Spanish I Length: Full Year

Open to Grades: 8, 9, 10, 11, 12

Spanish I students are introduced to the Spanish language through basic vocabulary and grammar. Students study the present tense of both regular and irregular verbs and are introduced to affirmative commands and the present progressive tense. Students are able to greet others, introduce themselves and communicate in short conversational phrases. Students learn about the culture and the history of the Spanish-speaking world, culminating in a project about a country of their choice.

Spanish II Length: Full Year

Open to Grades: 9, 10, 11, & 12

Spanish II students review the basic elements of Spanish grammar acquired in Spanish I and expand their vocabulary. Students master the present and present progressive verb tenses and are introduced to the preterite tense. Students are able to ask for information, describe people and places and communicate in sentence form. Students continue to learn about the different perspectives, practices and products of the Spanish-speaking world.

Spanish III Length: Full Year

Open to Grades: 10, 11, & 12

Spanish III students review the basic elements of Spanish grammar acquired in Spanish I and II and expand their communicative abilities. Students master the preterite verb tense and are introduced to the imperfect and future tenses and present subjunctive. Students will communicate in paragraph form and explain events that have happened in the past, as well as describe events that will take place in the future. Students continue to learn about the Spanish-speaking world through art, literature, and music.

Latin I Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Students are introduced to Latin language and ancient Roman culture. Focus is placed on basic grammar, syntax and vocabulary. Students explore Latin and English words through a set of recorded Latin stories with English translations. Upon completion of this course, students will be able to read and write in Latin on a basic level.

Latin II Length: Full Year

Open to Grades: 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Students enrolled in Latin II will expand upon what they learned in Latin I. They increase their skills and depth of knowledge through the practice of structures, forms, and vocabulary.

Mandarin Chinese I Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Mandarin Chinese I students are introduced to Chinese language and culture. Topics of study related to language acquisition include: basic syntax, simple vocabulary, written characters, and spoken tone. Students also learn about Chinese culture through exploration of art, literature, customs, and history

Mandarin Chinese II Length: Full Year

Open to Grades: 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Mandarin Chinese II students build upon skills developed in Chinese I. They are better able to understand and express themselves in Chinese and increase their vocabulary. They continue to explore the customs, history, and art of Chinese-speaking people.

Family Consumer Science

Parenting Skills Length: Semester

Open to Grades: 11 & 12

****This is a required course***

This course covers the basics of parenting and family skills. Topics include conception, contraception, pregnancy, child development, aging, and the family

Test Preparation

Traditionally, schools tend to expect the classroom teacher to carry the load for leading students to success on the PSSA. The Power to Perform on the PSSA series provides explicit learning opportunities for 6th, 7th and 8th grade students in the skill sets needed for success on the PSSA. It has been designed with a focus on the most recent Assessment Anchors and Eligible Content. All PSSA Preparation courses are Full Year.

PSSA Preparation: 7th Grade Mathematics
PSSA Preparation: 8th Grade Mathematics
PSSA Preparation: 7th Grade Reading
PSSA Preparation: 8th Grade Reading
PSSA Preparation: 8th Grade Science

Keystone Exam Preparation: Literature and English Composition Length: Full Year

Open to Grades: 10 & 11

This writing-intensive course provides a thorough and rigorous foundation for high school students looking to succeed on Pennsylvania's Keystone Exam in Literature and English Composition. Focusing directly on Assessment Anchors and Eligible Content and specially designed with questions that are directly modeled after the questions on the Keystone Exam, this course provides high school students with the practice and precision that is necessary for success on the exam.

Keystone Exam Preparation: Algebra I Length: Full Year

Open to Grades: 7, 8, 9, 10, & 11

This course is designed to remediate students with essential ideas in Algebra I. Students enrolled in this course will review concepts such as defining, evaluating, and comparing functions, linear equations, interpreting rate as slope and solving systems of equations. In addition to these concepts, students will also review creating graphs from data, displaying frequencies in a two-way table and identifying patterns of association.

Keystone Exam Preparation: Biology Length: Full Year

Open to Grades: 9, 10, & 11

This textbook-independent course in biology is designed to cover the assessment anchors involved in the Keystone Biology Exam. This course focuses heavily on cellular life and processes, but also includes DNA, evolution, genetic engineering, and ecosystem interactions.

Electives

Food and Nutrition Length: Full Year

Open to Grades: 10, 11, & 12

This course helps students better understand the principles of nutrition. Students gain a basic knowledge of nutrition and good health. They study healthy preparation and care of food as well as food management. They also learn about the food science involved in the preparation process.

Journalism Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***It is recommended that the student earn at least a 'C" in their most recent English class before enrolling in Journalism.***

This high school course includes a brief history of American journalism and discusses the duties of a journalist. Additional topics that are taught in this course include the rights and responsibilities of journalists, style and editing, news writing, sports writing, feature writing, editorial writing, newspaper design, yearbook design, advertising, and much more.

Computer Applications Length: Full Year

Open to Grades: 9, 10, 11, & 12

This course covers computer basics and focuses on detailed uses of Microsoft Office 2010 programs, including Word, PowerPoint, and Excel. It allows students to explore the new features built into the 2010 edition. In addition to exploring these programs, students study content related to Internet literacy, email etiquette, copyright/ ethics issues and HTML programming. They use this knowledge to increase their communication and technology skills.

Business Math Length: Full Year

Open to Grades: 11 & 12

Special Notes: ***This course is available to students seeking their third required math credit. Students must have completed two previous credits, or be enrolled in those courses in conjunction with Business Math.***

This high school business course is structured utilizing a three-pronged approach: basic math review, personal finance, and business mathematics. It builds and strengthens students' basic math skills in personal and business mathematics.

Mythology Length: Semester

Open to Grades: 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This course analyzes Greek and Roman myths about creation, nature, love and heroism. Students study the classics, becoming acquainted with some of the most famous stories of all time. They also discover the beginnings of drama and man's attempt to explain his universe as they delve into myths about Greek and Roman gods and their relationships with mortals.

SAT Preparation - Math Length: Semester

Open to Grades: 10 & 11

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This course is designed to prepare students for the math portion of the SAT. Students enrolled in this course spend a great deal of time understanding the SAT and honing the skills needed for test taking. They develop higher-order math strategies and problem-solving skills. They also work on a variety of math problems ranging from algebra to calculus in preparation for the SAT.

PA Driver's Education Length: Semester

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

The PA Driver's Education course provides an introduction to driver theory. Topics include signs and signals, safety, managing speed, driving practices, handling emergencies, and the Pennsylvania point system. Also covered are transportation-specific laws and regulations such as substance abuse and seatbelt laws.

Astronomy I Length: Semester

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Students explore the process of astronomical scientific discovery and begin to develop an understanding of the integrated study of the universe, which includes concepts of physics, mathematics, and chemistry. This course traces astronomy's observational foundation and continues to an in-depth exploration of our solar system. It emphasizes critical thinking and visualization

Astronomy II Length: Semester

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

At this level, students complete an extensive survey of the universe, moving beyond the exploration of our solar system found in Astronomy I to the vast wonders of our galaxy and larger cosmological concepts and structures. Other topics covered extensively include stellar formation, evolution, novae, supernovae and black holes and other strange objects. Additionally, students learn about the birth, future, and fate of the universe, as well as theories of extraterrestrial life and our place in the cosmos.

World Geography Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

In World Geography, students receive an overview of the cultural and physical geography of the world. They develop critical thinking skills as they explore the seven continents of the world. The text is supported by online resources that include maps, videos, primary and secondary sources and quizzes that help reinforce effective citizenship.

Art History Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Art History students will gain a basic understanding an appreciation of art as it is encountered at the high school level and beyond. Students begin with a study of art processes, criticism and aesthetics and progress to an overview of art history through to the 21st century.

Music History/Music Appreciation Length: Semester

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This course introduces students to perceptive listening and provides an engaging presentation of musical elements, styles and stylistic periods. Organized chronologically, this course provides a survey of music's evolution from the music of the Middle Ages to classical, jazz, blues, and rock. This course concludes by exploring the non-Western music traditions from Africa, India, and Japan.

Digital Citizenship Length: Semester

Open to Grades: 7 & 8

This course is entirely web-based and will prepare students to safely and effectively communicate online while helping them to become familiar with website privacy policies. Students will be able to identify cyber-bullying and ways to respond, thus making their online experience more enjoyable. Additional concepts and information students will gain from this course will include understanding copyright rules, browsing websites, and various methods of downloading.

Study Skills Length: Semester

Open to Grades: 7 & 8

The study skills course hones reading and study skills needed for academic success in high school. Students develop such abilities as: studying techniques, note taking, time management, listening, test taking, and research. They gain confidence as they master these basic skills and have the opportunity to apply them to other courses.

Accounting I Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

Accounting I students learn how to maintain accurate business records. Students study business transactions including working with source documents, handling ledger accounts, preparing worksheets and working with financial statements. They will gain a real-world understanding of the applications of accounting.

Business and Personal Law Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

This course examines legal obligations of parties involved in housing, business, and personal endeavors. Topics of study include contractual obligations, corporate responsibilities and marriage/divorce law.

Marketing Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

The Marketing course introduces students to basic marketing techniques and business decision-making processes. Students study the marketing process and increase their knowledge of markets, buyers, promotion and pricing. The course aims to improve students' understanding of how professional advertising agencies design, market, and distribute their products.

Personal Finance and Literacy Length: Full Year

Open to Grades: 9, 10, 11, & 12

Special Notes: ***Student must receive special permission from Virtual Coordinator to enroll in this course.***

The Personal Finance and Financial Literacy course exposes students to important financial issues they are likely to encounter in their lives. Topics include home buying, balancing a budget, and responsible use of credit and borrowing. This knowledge will increase students' abilities to manage their finances in a responsible and intelligent manner.

Creative Writing Length: Semester

Open to Grades: 9, 10, 11, & 12

This explores strategies used in creative writing and helps students to develop a deeper appreciation of good writing and established authors. Students create a variety of works ranging from poems to short stories. While writing prose, students review rules and guidelines for correct punctuation, grammar, and sentence structure. Effective, appropriate, and economical word choice is also practiced.

Test Taking Skills Length: Quarter

Open to Grades: 7 & 8

This course is designed to help prepare students to take standardized tests. Students enrolled in this course will review time management, rubrics, multiple-choice strategies and educated guessing. In addition to these general concepts, students will also review writing narrative and persuasive essays, reading comprehension strategies and math multiple-choice techniques.

World Literature Length: Full Year

Open to Grades: 11 & 12

This 36-week course is designed for the accelerated learner who wants to broaden their exposure to essential world texts and deepen their experience with literary analysis. Critical thinking skills will be developed as students analyze texts from the Mediterranean, Ancient India, Eastern Europe, and Asia.

Careers

Career Exploration Length: Semester

****Required course for 8th grade students***

The Career Exploration course equips students with a background and process for successfully transition from school to a career. Students complete a self-assessment – analyzing their interests, skills and goals – to begin the development of a targeted approach to their next educational steps and, ultimately, their careers. Additionally, students study and practice practical skills such as resume writing and interviewing. Various career opportunities are presented as well as the tools students need to further understand and research their own career directions.

Mercer Area Virtual Academy Course Selection 2023-2024

7TH Grade

English/ Language Arts	***Social Studies***	***Science***	***Math***	***Physical Education***	***Health***	***Test Prep***	***Electives***
Required	*Required*	*Required*	*Select One*	*Either Grade 7/8*	*Required*	*Select One*	*Optional*
7th Grade English 7th Grade Reading	Ancient World History	Earth Science	Pre-Algebra 7	MS Physical Education	Middle School Health II (Semester)	PSSA Math 7	Digital Citizen (Semester)
			Pre-Algebra			PSSA Reading 7	Study Skills (Semester)
			Algebra I			Keystone Prep Algebra	Test-Taking Skills (Quarter)

8TH Grade

English/ Language Arts	***Social Studies***	***Science***	***Math***	***Physical Education***	***Careers***	***Health***	***Foreign Language***	***Test Prep***	***Electives***
Required	*Required*	*Required*	*Select One*	*Either Grade 7/8*	*Required*	*Required*	*Optional*	*Select One*	*Optional*
8th Grade English 8th Grade Reading	American History 8	Life Science	Pre-Algebra 8	MS Physical Education	Career Exploration (Semester)	Middle School Health III (Semester)	French I	PSSA Math 8	Digital Citizen (Semester)
			Pre-Algebra					PSSA Reading 8	Study Skills (Semester)
			Algebra I				Spanish I	PSSA Science 8	Test-Taking Skills (Quarter)
			Geometry					Keystone Prep Algebra	

9TH Grade

<table>
<tr><th>English</th><th>Social Studies</th><th>Science</th><th>Math</th><th>Physical Education</th><th>Health</th><th>Foreign Language</th><th>Test Prep</th><th>Electives</th></tr>
<tr><td>Select One</td><td>Required</td><td>Required</td><td>Select One</td><td>1 Cr. to Graduate</td><td>Required</td><td>1 Cr. to Graduate</td><td>Recommended</td><td>5 Cr. to Graduate</td></tr>
<tr><td rowspan="3">9th Grade English</td><td rowspan="6">World History 9</td><td rowspan="6">Biology</td><td rowspan="2">Algebra I</td><td rowspan="6">HS Physical Education</td><td rowspan="6">Health I (Semester)</td><td>French I</td><td rowspan="4">Keystone Prep Algebra</td><td>Journalism</td></tr>
<tr><td rowspan="2">French II</td><td>Computer Applications</td></tr>
<tr><td rowspan="3">Geometry</td><td>PA Driver’s Ed (Semester)</td></tr>
<tr><td rowspan="2">Spanish I</td><td>Astronomy I (Semester)</td></tr>
<tr><td rowspan="3">9th Grade College Prep English</td><td>Astronomy II (Semester)</td></tr>
<tr><td rowspan="2">Spanish II</td><td>World Geography</td><td rowspan="5">Keystone Prep Biology</td><td>Art History</td></tr>
<tr><td rowspan="2">Algebra II</td><td>Music History (Semester)</td></tr>
<tr><td rowspan="2">Latin I</td><td>Accounting I</td></tr>
<tr><td>Business/Personal Law (Semester)</td></tr>
<tr><td>Chinese I</td><td>Marketing</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Personal Finance</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Creative Writing (Semester)</td></tr>
</table>

Graduation Requirements

4.0 - Credits of Language Arts
4.0 - Credits of Social Studies
3.0 - Credits of Science
3.0 - Credits of Mathematics
1.0 - Credits of Physical Education
1.0 - Credits of Health
0.5 - Credits of Family Consumer Science
1.0 - Credits of Arts/Humanities
1.0 - Credits of Technology
1.0 - Credits of Foreign Language
5.0 - Credits of Electives

10TH Grade

English	***Social Studies***	***Science***	***Math***	***Physical Education***	***Foreign Language***	***Test Prep***	***Electives***
Select One	*Required*	*Select One*	*Select One*	*1 Cr. to Graduate*	*1 Cr. to Graduate*	*Recommended*	*5 Cr. to Graduate*
10th Grade English	American History 10	Physical Science	Algebra I	HS Physical Education	French I	Keystone Prep Literature	Food and Nutrition
					French II		Journalism
							Computer Applications
			Geometry		Spanish I		Mythology (Semester)
						Keystone Prep Algebra	PA Driver's Ed (Semester)
					Spanish II		Astronomy I (Semester)
			Algebra II				Astronomy II (Semester)
10th Grade College Prep English					Spanish III		World Geography
		Chemistry					Art History
						Keystone Prep Biology	Music History (Semester)
			Algebra III/ Trigonometry		Latin I		Accounting I
							Business/Personal Law (Semester)
					Latin II		Marketing
							Personal Finance
			Pre-Calculus		Chinese I	SAT Prep Math (Semester)	Creative Writing (Semester)
					Chinese II		

Graduation Requirements

4.0 - Credits of Language Arts
4.0 - Credits of Social Studies
3.0 - Credits of Science
3.0 - Credits of Mathematics
1.0 - Credits of Physical Education
1.0 - Credits of Health
0.5 - Credits of Family Consumer Science
1.0 - Credits of Arts/Humanities
1.0 - Credits of Technology
1.0 - Credits of Foreign Language
5.0 - Credits of Electives

11TH Grade

English	***Social Studies***	***Science***	***Math***	***Physical Education***	***Health***	***Foreign Language***	***Family Consumer Science***	***Test Prep***	***Electives***
Select One	*POD Required*	*3 Cr to Graduate*	*3 Cr to Graduate*	*1 Cr. to Graduate*	*Either 11th/12th*	*1 Cr. to Graduate*	*Either 11th/12th*	*Recommended*	*5 Cr. To Graduate*
11th Grade English	Problems of Democracy/ Economics	Physical Science	Algebra I	HS Physical Education	Health II (Semester)	French I	Parenting Skills	Keystone Prep Literature	Food and Nutrition
		Chemistry							Journalism
	AP European History		Geometry			French II			Computer Applications
		Physics							Business Math
	AP U.S. History	Environmental Science	Algebra II			Spanish I			Mythology (Semester)
								Keystone Prep Algebra	PA Driver's Ed (Semester)
11th Grade College Prep English		Anatomy & Physiology	Algebra III/ Trigonometry			Spanish II			Astronomy I (Semester)
	AP World History								Astronomy II (Semester)
	AP Human Geography	AP Chemistry	Pre-Calculus			Spanish III			World Geography
									Art History
		AP Biology							Music History (Semester)
			Probability and Statistics			Latin I			Accounting I
	AP Psychology	AP Environmental Science				Latin II		SAT Prep Math (Semester)	Business/Personal Law (Semester)
									Marketing
		AP Physics I: Algebra Based	AP Calculus AB			Chinese I			Personal Finance
									Creative Writing (Semester)
		AP Physics II: Algebra Based	AP Calculus BC			Chinese II			World Literature (Semester)

Graduation Requirements

4.0 - Credits of Language Arts
4.0 - Credits of Social Studies
3.0 - Credits of Science
3.0 - Credits of Mathematics
1.0 - Credits of Physical Education
1.0 - Credits of Health
0.5 - Credits of Family Consumer Science
1.0 - Credits of Arts/Humanities
1.0 - Credits of Technology
1.0 - Credits of Foreign Language
5.0 - Credits of Electives

12TH Grade

English	***Social Studies***	***Science***	***Math***	***Physical Education***	***Health***	***Foreign Language***	***Family Consumer Science***	***Electives***
Select One	*4 Cr. To Graduate*	*3 Cr. To Graduate*	*3 Cr. To Graduate*	*1 Cr. To Graduate*	*Either 11th/12th*	*1 Cr. To Graduate*	*Either 11th/12th*	*5 Cr. To Graduate*
12th Grade English	Psychology (Semester)	Physical Science	Algebra I	HS Physical Education	Health II (Semester)	French I	Parenting Skills	Food & Nutrition
		Chemistry				French II		Journalism
	Sociology (Semester)		Geometry					Computer Applications
		Physics				Spanish I		Business Math
	AP European History							Mythology (Semester)
		Environmental Science	Algebra II			Spanish II		PA Driver's Ed (Semester)
12th Grade College Prep English	AP U.S. History							Astronomy I (Semester)
		Anatomy and Physiology	Algebra III/ Trigonometry			Spanish III		Astronomy II (Semester)
	AP World History	AP Chemistry						World Geography
						Latin I		Art History
		AP Biology	Pre-Calculus					Music History (Semester)
AP English Literature & Composition	AP Human Geography							Accounting I
		AP Environmental Science	Probability and Statistics			Latin II		Business/Personal Law (Semester)
	AP Psychology							Marketing
								Personal Finance
		AP Physics I: Algebra Based	AP Calculus AB			Chinese I		Creative Writing (Semester)
	AP U.S. Government and Politics	AP Physics II: Algebra Based	AP Calculus BC			Chinese II		World Literature (Semester)

Graduation Requirements

4.0 - Credits of Language Arts
4.0 - Credits of Social Studies
3.0 - Credits of Science
3.0 - Credits of Mathematics
1.0 - Credits of Physical Education
1.0 - Credits of Health
0.5 - Credits of Family Consumer Science
1.0 - Credits of Arts/Humanities
1.0 - Credits of Technology
1.0 - Credits of Foreign Language
5.0 - Credits of Electives