

WAYNE TOWNSHIP PUBLIC SCHOOLS

# 2022-2023 PROGRAM OF STUDIES

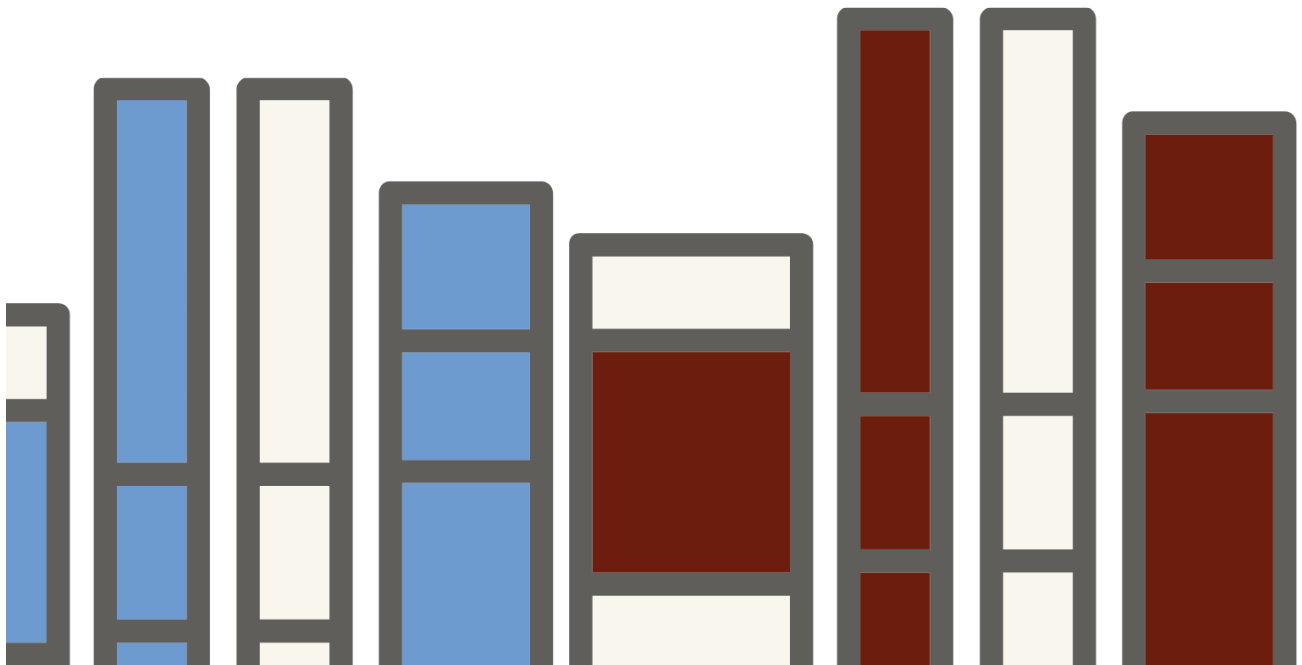
**Wayne Hills High School**  
Principal, Michael Rewick



**Wayne Valley High School**  
Principal, Kenneth Palczewski



Revised January 2022



# HIGH SCHOOL PROGRAM OF STUDIES – 2022 - 2023

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## **INTRODUCTION**

The Wayne Township Board of Education believes that the fundamental aim of all education should be to understand a democratic society and the ramifications of its global involvement, to become familiar with its nation's governmental functions and processes on national, state and community levels, and to develop supportive democratic attitudes in interpersonal relationships. The Board's major goal is to provide a formal educational program through which students are encouraged to uphold the principles of a democratic society and inspire a devotion to it; to recognize its responsibilities to society and to create a desire to improve it.

The Board of Education believes that the instruction and development of each student should be arranged with due regard to individuality in the most efficient manner possible. A well-adjusted, well-rounded individual, able and willing to contribute to the improvement of his/her society and the solution of its problems, is the desired goal.

## **CIVIL RIGHTS COMPLIANCE**

Discrimination based on race, ethnicity, color, national origin, gender, religion and/or disability is prohibited in the Wayne Township Public Schools. The Board of Education has implemented policies and procedures to ensure that all Wayne students have equal education opportunities (Policy No. 2224 [Affirmative Action]; Policy No. 5154.4 [Nondiscrimination]; Policy No. 6121 [Equal Education opportunities]) and ways to protect themselves against discriminatory harassment (Regulation No. 2224 [Discriminatory Harassment]). In addition, the Board of Education has designated its Director of Student Support Services (Dr. Dana Sir - 973-317-2156) as its Section 504 coordinator in charge of monitoring education plans to accommodate general education students with disabilities. The Board of Education has also designated an Assistant Director of Student Support Services (Scot Burkholder 973-317-2165) as its Affirmative Action Officer in charge of monitoring and enforcing non-discrimination and equity policies and practices in the school district. If you have any questions or problems related to equal access or discrimination, please feel free to contact either individual.

## SCHOOL COUNSELING SERVICES

The School Counseling Departments at both high schools consist of a lead counselor, school counselors and clerical staff all dedicated and trained to provide counseling and educational services to students and their parents/guardians. These services can be categorized into three major functions: Counseling, Consulting, and Information Management. A school counselor is a person who has been highly trained specifically to help young people with personal issues, educational progress, career planning and further education opportunities. Your counselor is skilled to help you realize your fullest potential as a unique human being.

The services that you receive from your counselor are varied and to a great extent depend upon you. You should never hesitate to see your counselor for any reason. Depending on your needs, your counselor can help you assess your strengths and limitations, make decisions, discover special talents and abilities, plan your education, decide on a career, and more!

We welcome your questions and opinions concerning our programs and services. Appointments may be made with counselors by calling the School Counseling Department.

### Directory of School Counselors

<b>Wayne Hills 973-317-2029</b>	<b>Wayne Valley 973-317-2216</b>
Ms. Sara Bekteshi	Mr. William Cheval
Mr. Harrison Bender	Ms. Jessica Feinberg
Ms. Alexandra Kartsakalis	Mr. Andrew Imperatore
Mr. Jonathan Roman	Ms. Catherine LaViola
Ms. Nicole Sandas	Ms. Felicia Michelson
Dr. Mati Sicherer	Mrs. Jennifer Montana
Ms. Christine Zakk	Mr. Michael Paul

### DIRECTORY OF ASSISTANT PRINCIPALS OF CURRICULUM AND INSTRUCTION

The following personnel are available to answer your questions regarding course placement, department policies, grading, course proficiency expectations, and any other concerns applicable to their department:

<b>Wayne Hills High School</b>		<b>Wayne Valley High School</b>	
Mr. Jacob Cavins	Math, Computer Science	Dr. Kimberly Moreno	Science, Technology, Family & Consumer Science
Mr. Benjamin Glaz	Science, Fine & Performing Arts, Guidance	Mrs. Jennifer Grimbilas	English, Fine & Performing Arts
Ms. Kristy Stofey	Social Studies, F&CS Technology, Business	Mr. George Martinez	Social Studies, World Language, Business
Ms. Christina Ventimiglia	English, World Language	Mr. Scott Wisniewski	Math, Computer Science, Guidance
Mr. Christopher Foglio – Special Education (WH & WV) Mr. David Drozjock - Athletics, Physical Education, Health (WH & WV)			

## HIGH SCHOOL GRADUATION REQUIREMENTS

### Subject Requirements

- Physical Education and Health for each year of attendance
- 4 Years of Language Arts Literacy (English)
- 3 years of Mathematics\*
- 3 years of Science\*
- 2 years of United States History
- 2 years of a World Language
- 1 year of Visual and Performing Arts
- 1 year in Career Education, and Consumer, Family and Life Skills
- 1 year of World History
- 1 year of Humanities
- ½ year of Financial, Economic, Business and Entrepreneurial Literacy
- Technological Literacy (infused into the curriculum)

*\*It is highly recommended that students pursue a 4 year course of study in math and science to meet the admissions criteria of many colleges and universities.*

**The following is a list of courses which fulfill various graduation requirements. Please note that courses may not be used to fulfill more than one requirement**

<p><b><u>HUMANITIES</u></b></p> <ul style="list-style-type: none"> <li>● All English Electives</li> <li>● All Art Courses</li> <li>● All World Language Courses</li> <li>● Materials of Music</li> <li>● All World Studies Courses</li> </ul>	<p><b><u>VISUAL OR PERFORMING ARTS</u></b></p> <ul style="list-style-type: none"> <li>● All Studio Art Courses</li> <li>● All Music (except Materials of Music)</li> <li>● All TV Production courses</li> <li>● CAD</li> <li>● Graphic Arts</li> <li>● Photography</li> </ul>
<p><b><u>CAREER, CONSUMER, FAMILY, AND LIFE SKILLS</u></b></p> <ul style="list-style-type: none"> <li>● All Family and Consumer Science Courses</li> <li>● All Business Courses</li> <li>● All Technology Education Courses</li> <li>● All Computer Courses</li> <li>● All TV Production Courses</li> <li>● Journalism</li> <li>● Biology for Allied Health</li> <li>● Structured Learning Experience</li> </ul>	<p><b><u>FINANCIAL LITERACY</u></b></p> <ul style="list-style-type: none"> <li>● Financial Literacy</li> <li>● Principles of Business (non-CTE track)</li> <li>● Accounting (non-CTE track)</li> <li>● Entrepreneurship</li> <li>● College Business II</li> <li>● AP Economics</li> </ul>

### Credit Requirements

**135 credits are required for graduation.** Students are permitted to take a maximum of **40 credits** during the school year. Students will not receive any credit for study hall. Please see the “Grade Point Average” section for calculation thereof.

## Testing Requirements

### **For the Class of 2023\* through 2025:**

#### **ELA**

If, after completing the New Jersey Graduation Proficiency Assessment in grade 11, students did not demonstrate proficiency by passing the ELA component, such students may access the following pathways:

- Pathway 2: By meeting the designated cut score on a substitute competency test; **or**
- Pathway 3: By submitting, through the district, a student portfolio appeal to the New Jersey Department of Education.

#### **Mathematics**

If, after completing the required New Jersey Graduation Proficiency Assessment in grade 11, students did not demonstrate proficiency by passing the mathematics component, such students may access the following pathways:

- Pathway 2: By meeting the designated cut score on a substitute competency test; or
- Pathway 3: By submitting, through the district, a student portfolio appeal to the New Jersey Department of Education.

### **For the class of 2026 and beyond:**

The NJDOE is committed to providing fair notice to students and educators and will continue to collaborate with stakeholders to transition to the next generation of statewide assessments.

\*There is no graduation assessment requirement for any student who is expected to graduate with the class of 2023. Students in the class of 2023 must still meet all the other State and local graduation requirements, including but not limited to credit, curriculum, and attendance requirements. The graduation assessment requirements for the classes of 2024 and 2025 remain in place.

For detailed testing options and requirements please refer to the Department of Education site: [https://www.nj.gov/education/assessment/requirements/2023\\_2025.shtml](https://www.nj.gov/education/assessment/requirements/2023_2025.shtml)

## GRADING SYSTEM

The Wayne School District uses the following grading system for high schools:

Letter Grade	Numerical Grade	General	Enriched	Honors/AP
A	93-100	4.0	4.25	5.0
A-	90-92.99	3.67	3.92	4.67
B+	87-89.99	3.33	3.58	4.33
B	83-86.99	3.0	3.25	4.0
B-	80-82.99	2.67	2.92	3.67
C+	77-79.99	2.33	2.58	3.33
C	73-76.99	2.0	2.25	3.0
C-	70-72.99	1.67	1.92	2.67
D+	67-69.99	1.33	1.33	1.33
D	63-66.99	1.0	1.0	1.0
D-	60-62.99	.67	.67	.67
F	59.99 & below	0	0	0

## GRADE POINT AVERAGE

Your **GPA, or grade point average**, is the average of all of your final grades at the end of the year. It is determined by multiplying the number of credits in a course by the grade value of the course.

Each letter grade is assigned a value. All regular classes are considered non-weighted. Honors and AP courses are assigned a greater value, called a “weighted” value, due to the additional requirements of those courses.

The grade value of the letter grade is multiplied by the number of credits in the course. The total is called quality points. **For example:**

**Non- Weighted      Grade      Grade Value X Credits      =      Quality Points**

English                      B                      3      X      5      =      15

**Weighted              Grade              Grade Value X Credits      =      Quality Points**

English (H)                      B                      4      X      5      =      20

The total quality points from all of your courses are then divided by the number of credits taken during the year to determine your GPA. GPA will be taken out as many decimal places as necessary to determine a valedictorian.

Effective September 1, 2008, the Wayne School District has amended its Board of Education Policy so that class rank shall be maintained, but evidence of the student's class rank shall not be indicated on the student's transcript. Upon request from the student and/or his/her parents/guardians, the School Counseling Office will forward the Official Class Rank and/or other unofficial test results such as PSAT/NMSQT or AP scores directly to the designated colleges, universities, or scholarship organizations. Official testing results come only from the College Board.

## **ATTENDANCE POLICY**

### **Minimum Days of Attendance**

The local Regulation (No. 5110) for the minimum number of days in attendance in order to receive course credit is a **166 day** requirement. A student absent for **15 or more** days of school may be liable for the penalties of this policy if the absences are unexcused. Class periods missed through absence from school or early dismissal will be counted as absences. School approved absences will not count.

The course maximum thresholds are outlined as follows:

- **14 Days** for a Full-Year course
- **9 Days** for Physical Education
- **7 Days** for a Half-Year course
- **4 Days** for a Quarter course

### **Promotion**

Promotion from grade to grade in the public high schools of Wayne Township, New Jersey is contingent upon the tally of credits for successfully completed accredited courses as approved by the Wayne Board of Education. The tally of credits will be determined at the end of the academic year summer session. Grade to grade promotion will be based upon the accumulation of credits as noted below:

**1) 30 credits** are required to become a Sophomore (including passing English 9).

**2) 65 credits** are required to become a Junior (including passing English 10).

**3) 100 credits** are required to become a Senior (including passing English 11 and United States History I).



## COURSE LEVELS

It is the mission of Wayne Public Schools to prepare all students at the high school level for college and post-secondary education. With that goal in mind, all of our course levels offer a curriculum rich in college preparatory topics and skills. Course leveling is made at the recommendation of the classroom teacher. Changing course levels is possible only through the completion of the first marking period, subject to space in the requested course, and with administrative approval.

- **Advanced Placement** – College level courses that use approved College Board Advanced Placement curriculum leading to the taking of an AP exam. Departmental or teacher approval is required for placement in these courses. Courses denoted AP or Honors are weighted in the GPA. **Students taking courses designated at the AP level are prepared for and expected to take the exam in May.**
- **The Honors Course Sequence** – Honors classes expect students to perform above grade level with critical analysis and in-depth study. Students will be expected to be able to synthesize and evaluate information at a high level on Bloom's taxonomy. Registration in these courses is through departmental recommendation based on the student's previous academic performance. Courses denoted AP or Honors are weighted in the GPA.
- **The Enriched Course Sequence** - Enriched courses are designed for students who are at or above grade level and have a strong work ethic and grasp of foundational skills. These courses enrich the curriculum through increased pace, in-depth study, and additional topics of interest to the regular course of study. Enriched courses are denoted with an "E" on student transcripts.
- **The General Course Sequence** – College-preparatory course sequence for students whose skills are at grade level.

## DUAL ENROLLMENT OPPORTUNITIES

Several courses throughout the program of studies are denoted as having a dual enrollment option. Through partnerships with various local colleges, students will have the opportunity to earn college credits in addition to satisfying high school requirements, if they choose, as part of the course. Tuition rates, fees, and requirements vary by course, but these courses are offered at a substantially reduced rate when compared to tuition at the colleges. The courses are listed below. For specific credits and college affiliations, please see your school counselor.

<p><b><u>Automotive Technology:</u></b></p> <ul style="list-style-type: none"><li>● Intro to Automotive</li><li>● Auto Occupations: Steering and Brakes</li><li>● Auto Occupations: Electrical Systems</li><li>● Auto Occupations: Engine Performance</li></ul> <p><b><u>Business:</u></b></p> <ul style="list-style-type: none"><li>● College Accounting I</li><li>● College Accounting II</li><li>● College Business 1</li><li>● College Business 2</li><li>● Entrepreneurship</li><li>● Marketing I</li><li>● Marketing II</li></ul> <p><b><u>Computer Science and Math:</u></b></p> <ul style="list-style-type: none"><li>● Advanced Programming in Java</li><li>● Honors Programming in Java</li><li>● Discrete Mathematics</li></ul>	<p><b><u>Education/Social Science:</u></b></p> <ul style="list-style-type: none"><li>● Child Development III</li><li>● Introduction to Psychology</li><li>● Introduction to Sociology</li></ul> <p><b><u>Arts and Humanities:</u></b></p> <ul style="list-style-type: none"><li>● College Composition 1</li><li>● College Composition 2</li><li>● Photography III</li><li>● Music Perspectives (WV)</li></ul> <p><b><u>Science:</u></b></p> <ul style="list-style-type: none"><li>● Anatomy &amp; Physiology Honors</li></ul> <p><b><u>Engineering:</u></b></p> <ul style="list-style-type: none"><li>● CAD II</li><li>● CAD III</li><li>● Robotics III (WV)</li></ul>
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## **SENIOR OPTION/OPTION II**

### **STRUCTURED LEARNING EXPERIENCE**

**12**

The Structured Learning Experience Course is designed to provide general education students an opportunity to explore a career while attending a traditional high school setting. Students attend classes for part of the day and then are granted time to work in the community at a Structured Learning Experience (SLE). This SLE is chosen by the students with input and approval from the teacher. Each student is required to work 12 to 15 hours a week for a total minimum of 400 hours. Students may only enroll in SLE with the recommendation of their school counselor and administrative approval. This course helps students meet the Career, Consumer, Family, and Life Skills graduation requirement.

- Senior Internship Experience - With this option, the student participates in an unpaid internship with a professional in a field of their interest. The work is unpaid and students can earn a range of credits from 5 to 20. This option does not require enrollment in the SLE class.
- Work Experience - This option gives students the chance to gain real workplace experience through a paid job while also earning high school credit. The participant is paid by their employer and can earn a range of credits from 5-20. This option requires enrollment in the SLE class.
- Automotive Experience - For this experience, students must be enrolled in Auto classes which can earn each student 10-20 credits. Please see Auto Occupations: Work Study in the Tech Education section of this book for more details.

### **EARLY COLLEGE EXPERIENCE**

**12**

A career-focused or exploratory experience where students become directly involved in a college course. Please see your school counselor for more information about how to apply for this option.

## COURSE DESCRIPTIONS

### ART

Course Title	Grade Level	Credits	Course Level	Prerequisite
Visual Foundations	9-11	5	General	None
Three Dimensional Design	10-12	5	General	Visual Foundations
Design & Composition	10-12	5	General	Drawing & Painting or Adv. Drawing and Painting
Fashion Figure Drawing	10-12	5	General	Visual Foundations
Drawing and Painting	10-12	5	General	Visual Foundations
Adv. Drawing & Painting	10-12	5	General	Drawing & Painting or Design & Comp.
AP Art History	10-12	5	AP	Teacher recommendation
AP Art and Design - Drawing	12	5	AP	Portfolio Prep or Advanced Drawing & Painting

#### VISUAL FOUNDATIONS

**5 CREDITS**

**9-11**

This course is the prerequisite for all art courses and is meant for the beginning artist. Students will learn how to see like artists and use this ability to draw better. This course develops art skills in a variety of media through exploration of the art elements and principles of art and design. It builds a greater understanding of art, not only through the student's production of artwork, but also through study of a variety of visual art works from different periods and cultures. Students with special interests or abilities will be encouraged to realize and develop their talent.

#### THREE-DIMENSIONAL DESIGN

**5 CREDITS**

**10-12**

This course builds upon the previously learned elements and principles of design in a three dimensional format. We will be focusing on ceramics, wire, plaster, assembling materials, carving, and constructing sculptures.

#### DESIGN & COMPOSITION

**5 CREDITS**

**10-12**

This course focuses on two-dimensional media and how artists organize visual elements and principles of design to create successful compositions in various works of art. Students will work with a variety of media and explore the wide range of challenges that designers and artists face in the exploration of two-dimensional design.

#### FASHION FIGURE DRAWING (WV)

**5 CREDITS**

**10-12**

In this full year course, students will learn to develop and draw fundamental fashion figures including figure proportion, movement, fashion attitude and garment details through analysis of photographs and figure research as a basis for the creation of fashion design sketches. Accurate rendering of fabrics and technical flat drawings of garments in correct proportion will further enhance their drawing communication skills. Students will develop a collection of

designs from conception rendering and presentation of a 2D capsule collection for a season from day to evening wear.

**DRAWING AND PAINTING**

**5 CREDITS**

**10-12**

This course will continue to develop concepts learned in Visual Foundations. In the Drawing and Painting Studio, students will develop skills in perceptual drawing and painting using the human figure, landscape, still life or theme. Students will study major art movements from the Renaissance through the 19<sup>th</sup> Century and famous artists associated with these movements. Using the elements and principles of design students will learn to analyze and appreciate art.

**ADVANCED DRAWING AND PAINTING/PORTFOLIO PREP**

**5 CREDITS**

**10-12**

This is a demanding course in which students develop a portfolio of work that may be used for submission to an art school or as an art supplement for college applications. Students must work at a very rigorous pace and be extremely self-motivated. Requirements include weekly sketchbook assignments, gallery reports, and projects created in-class and out of class. Students enrolled in Advanced Drawing & Painting may apply to be considered for AP Studio Art.

**ADVANCED PLACEMENT ART HISTORY**

**5 CREDITS**

**10-12**

This is an accelerated, college level course that is intended to prepare students for the AP Art History Exam. If students pass this exam with a score of a 4 or 5 they can receive 3 college credits. This chronological study of art history from Stone Age to Post Modern provides students with a college level experience. AP Art History will allow students to examine European/western images and non-western cultural art from past to present.

**ADVANCED PLACEMENT ART AND DESIGN - DRAWING**

**5 CREDITS**

**12**

AP Art and Design - Drawing is an accelerated college level course where students can earn 3 college credits for submitting a 2-D or Drawing portfolio to the College Board. The 2-D portfolio will develop skills in two-dimensional mediums such as graphic design, photography, collage, printmaking, and others as the principles of 2-D design are explored. The drawing portfolio will develop skills in drawing as different media and approaches are explored. AP Art and Design - Drawing is for highly motivated students who are seriously interested in the study of art; the program demands a significant time commitment.

# BUSINESS

Course Title	Grade Level	Credits	Course Level	Prerequisite
Principles of Business	9-12	5	General	None
College Marketing I	10-12	5	General	None
College Marketing II	11-12	5	General	Marketing I
College Accounting I	10-12	5	General	None
College Accounting II	11-12	5	General	College Accounting I
College Business I	11-12	2.5	General	None
College Business II	11-12	2.5	General	College Business I
Entrepreneurship	10-12	2.5	General	None
Financial Literacy	9	2.5	General	None
AP Economics	11-12	5	AP	Algebra II and Math or Business Teacher Recommendation

## PRINCIPLES OF BUSINESS

**5 CREDITS**

**9-12**

This class is intended to be an introductory business course that provides students with a basic foundation of knowledge in a variety of business topics. The subjects covered in this class include discussion of business types and ownership structures, strategies for owning and running a business, business ethics and social responsibility, the role of government in business, economics, accounting, marketing, personal finance, and global business concepts. This course benefits all students planning to take future business classes and who plan to enter the world of work.

## COLLEGE MARKETING I

**5 CREDITS**

**10-12**

Marketing affects almost every part of your daily life: products you buy, stores where you shop, and the advertising to which you are exposed. Students receive instruction in advertising, sales, marketing, retailing and career planning. This is a valuable course for all students, especially those who plan on owning their own business or majoring in business in college. **This course may be offered as a Dual Enrollment course for college credit.**

## COLLEGE MARKETING II

**5 CREDITS**

**11-12**

This advanced marketing course develops student understanding and skills in distribution, financing, marketing-information management, pricing, product/service management, promotion, and selling. Opportunities are provided to apply scientific problem solving when engaged in marketing information gathering, processing and reporting. Emphasis will be placed on the impact that customer behavior has on the implementation of marketing function. Financial considerations, as they relate to business profit, will also be explored. Throughout the course, students are presented with problem solving situations for which they must apply academic and critical thinking skills. **This course may be offered as a Dual Enrollment course for college credit.**

**COLLEGE ACCOUNTING I****5 CREDITS****10-12**

Accounting is often called the “language of business” and is an essential course for any student interested in studying or working in business. In this accelerated, college-level course, students are introduced to important terminology used in the accounting and finance industry. Students will learn how to complete the entire range of accounting activities performed by a business during a fiscal period including: identifying and classifying accounts, recording transactions using a journal and ledger, preparing a variety of financial statements, and conducting financial analysis. The study of current events related to accounting, especially the exploration of careers within the accounting field, will also be covered. Spreadsheets will be introduced and used extensively in this course in order to increase efficiency and further prepare students for a future in business. Ethics in the reporting of financial results will also be discussed. **This course may be offered as a Dual Enrollment course for college credit.**

**COLLEGE ACCOUNTING II****5 CREDITS****11- 12**

In this course, students will gain a more in-depth understanding of concepts previously introduced in College Accounting I. Focus is placed on the proper reporting of specific accounts such as inventory, receivables, fixed assets, payables and payroll, stocks and bonds, and cash flows. The study of current events related to accounting, especially the exploration of careers within the accounting field, will also be covered. Students will use spreadsheets extensively throughout the course and will learn how to use the accounting programs Excel and QuickBooks to record business transactions and generate accounting reports. Students will also use financial resources, including filings with the Securities and Exchange Commission, to conduct analysis of companies. This class is highly recommended for students serious about studying or working in business. **This course may be offered as a Dual Enrollment course for college credit.**

**COLLEGE BUSINESS I: INTRODUCTION TO BUSINESS****2.5 CREDITS****11-12**

This course introduces the various fields of business study. Topics include economic systems, entrepreneurship, and the increasingly diverse environment for business, management, marketing, accounting, finance, banking, insurance, ethics and business law. This course prepares students for high-level business studies. This course is excellent for non-business majors who wish to gain an introduction to financial and economic survival leading to successful financial planning. **This course may be offered as a Dual Enrollment course for college credit.**

**COLLEGE BUSINESS II:  
PERSONAL FINANCE & MONEY MANAGEMENT****2.5 CREDITS****11-12**

This course introduces students to the complexities of modern personal money management and helps them avoid problems in everyday living. The topics covered include the development of a needs analysis and budgeting basic investment options, the intricacies of home ownership, consumer credit, the need for insurances, and retirement planning. **This course may be offered as a Dual Enrollment course for college credit.**

## **ENTREPRENEURSHIP**

**2.5 CREDITS**

**10-12**

Tailored for future business owners, the course will prepare students for the workforce of tomorrow. The course will provide a flexible background that will enable students to make career shifts and meet the demands of a constantly changing global marketplace. Students will demonstrate knowledge of the concepts of marketing, accounting, and finance; franchising, production and human resources management; global competition; and social, environmental, and legal issues. Throughout the year, students will be asked to develop innovative ideas and conduct feasibility studies, culminating in the writing of a business plan. This course fulfills the financial literacy requirement. **This course may be offered as a Dual Enrollment course for college credit.**

## **FINANCIAL LITERACY**

**2.5 CREDITS**

**9**

Financial Literacy is essential in meeting the financial challenge of the 21st Century. The competencies, which form the basis for this ½-year course, enable students to analyze their personal financial decisions, evaluate the costs and benefits of their decisions, recognize their rights and responsibilities as consumers, and apply the knowledge learned in school to financial situations encountered later in life. Students will learn how choices influence occupational options and future earning potential. The course content is designed to help the learner make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success. Therefore, this course is geared toward practical knowledge that is necessary for financial decision making in everyday life.

## **AP ECONOMICS**

**5 CREDITS**

**11-12**

The Advanced Placement Economics program is designed for students who possess special skills and interests in the field of economics and who plan to seek advanced standing upon admission to college. The program offers two distinct sections: microeconomics and macroeconomics. The AP Macroeconomics course provides students with a thorough understanding of the principles of economics and how economists use those principles to examine aggregate economic behavior. The AP Microeconomics course provides students with an understanding of the principles of economics as they apply to individual decision-making units, including individual households and firms. Students will be prepared to take both AP Economic Examinations: Microeconomics and Macroeconomics. **This course is suited for Enriched and Honors level students who have completed Algebra II and with teacher recommendation.**





of student performance is based on projects, labs, and quizzes. The focus is on getting students comfortable with concepts and techniques while introducing students to the power of computer science. Projects in the course are flexible enough to accommodate students at a variety of levels. Students with limited CS experience are welcome. Students with more experience have opportunities to expand their abilities. Honors Computer Programming is a required prerequisite for AP Computer Science A. **Honors Computer Programming may be offered as a Dual Enrollment course for college credit.**

### **AP COMPUTER SCIENCE PRINCIPLES**

**5 CREDITS**

**10-12**

Computer Science is an integral part of today's society and is rapidly becoming an essential skill across all disciplines. This course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. Topics that will be covered include creativity, abstraction, data and information, algorithms, programming, the Internet, and global impacts. Students will utilize resources such as MIT App Inventor, JavaScript and others to display their understanding of 15 computer science principles and create their own computational artifacts. Completed projects may include mobile apps, websites, music, games, and more. While the course is designed to appeal to a wide array of students, it is still a college-level curriculum and will be challenging.

### **AP COMPUTER SCIENCE A**

**5 CREDITS**

**11-12**

AP Computer Science A is broadly intended to be equivalent to a 1st semester college CS course. AP CS A covers some of the same topics as our introductory programming courses but in greater depth. Significantly more emphasis is placed on interpreting, analyzing, and manipulating code written by others. AP CS A includes object oriented design, inheritance & polymorphism, recursion, and algorithms. This course is targeted to students interested in computer science regardless of anticipated college major. As a college level course the pacing is quick. Student performance is evaluated primarily using tests & quizzes, projects, and labs. Students who perform well throughout AP CS A will be well prepared for the AP CS A Exam.

### **ADVANCED COMPUTER PROGRAMMING**

**5 CREDITS**

**12**

Advanced Computer Programming is broadly intended to be equivalent to a 2nd semester college data structures course. Much of the content is based on the B level material from the old AP Computer Science B course, discontinued by the College Board in 2009. Advanced Computer Programming follows AP Computer Science A. The course focuses on the implementation and usage of data structures. Complex algorithms are also presented and analyzed. Students become familiar with techniques to solve complex problems with interacting classes. Significantly greater emphasis is placed on the efficiency and scalability of code than in previous courses. The course is for students interested in continuing their studies in computer science, regardless of anticipated college major. The pacing is slower than AP CS A to allow

more in depth exploration of each topic. Student performance is evaluated primarily using projects and formal assessments. **The course may be offered as a Dual Enrollment course for college credit.**

### **WEB DEVELOPMENT**

**5 CREDITS**

**10-12**

This course is designed to introduce students to website development. The course introduces a variety of languages and tools, focusing on what a student needs to know to start creating web pages. The Hypertext markup language (HTML) and Extensible Hypertext markup language (SHTML) will be covered extensively. The students will use Cascading Style Sheets (CSS and JavaScript to make dynamic web pages (DHTML). They will learn to create images, image maps, and animation for a website. The students will learn to code by hand using a text editor and also to use software intended for website development, such as Dreamweaver, Photoshop, Fireworks and Flash. An on-going project of this course will be the maintenance of the high school's website.

### **MOBILE APPLICATIONS**

**5 CREDITS**

**9\*-12**

Mobile Applications presents an introduction to developing apps for mobile devices. Topics include fundamentals of programming (ex: conditionals, loops, lists, functions) as well as mobile specific concerns (use of sensors, relative layouts, navigation among screens). Students will have opportunities to practice with instructor designed projects as well as opportunities to create apps of their own designs. Considerable effort is put into making assignments engaging and offering students opportunities for creative expression. Students spend a significant portion of class time programming collaboratively and individually. Evaluation of student performance is based on projects, labs, and quizzes.

**\*Only students who have successfully completed Algebra I or higher are eligible at this grade level. Admission is limited and will be at the discretion of the supervisor.**

# ENGLISH

Course Title	Grade Level	Credits	Course Level	Prerequisite
English 9	9	5	General	None
			Enriched	
			Honors	
English 10	10	5	General	English 9
			Enriched	
			Honors	
English 11	11	5	General	English 10
			Enriched	
			Honors	
English 12	12	5	General	English 11
			Enriched	
AP English 12	12	5	AP	English 11 Honors
AP Language & Comp.	11-12	5	AP	English 9-10 English Enriched or Honors Sequence; Teacher recommendation
Theater Arts I	9-12	5	General	None
Theater Arts II	10-12	5	General	Theater Arts I
Philosophy	10-12	5	General	None
Journalism	9-12	5	General	None
Publication Seminar (WV)	9-12	5	General	None
Film Studies	10-12	5	General	None
Film Studies II	11-12	5	General	Film Studies I
Writing Workshop	9-12	2.5	General	None
College Composition I	11-12	2.5	General	None
College Composition II	11-12	2.5	General	College Composition I

## ENGLISH 9

**5 CREDITS**

**9**

In this full-year course, students are introduced to the major types of literature, including the story, drama, poetry, and the novel. Reading and analysis of literature and nonfiction is a fundamental aspect of the, and all, English courses. Composition in the ninth grade stresses spelling, vocabulary building, punctuation, grammar, and paragraph structure, with emphasis on the techniques of writing essays. Students develop editing skills and self-reflective analysis. The research process is stressed as students develop skills in finding and evaluating information and composing research based papers.

## ENGLISH 10

**5 CREDITS**

**10**

The readings for this course are primarily a survey of American literature, from the Colonial period to modern times, involving a number of related paperback supplements by quintessential American authors. Critical reading and analysis of texts help students build literacy fluency. Vocabulary development and library skills are also essential parts of this program. Composition work in the sophomore year includes sentence variety, transitions, emphasis and principles of

paragraph development. Continuing attention is given to grammar and mechanics. Students also write an MLA documented guided research paper.

**ENGLISH 11**

**5 CREDITS**

**11**

English literature from the Anglo-Saxon period to the twentieth century is studied thematically, supplemented by additional multicultural and British paperback works and critical readings. A comprehensive study of poetry, covering connotation, imagery, figurative language, allusion, tone, rhythm, meter, and pattern, is a major part of the eleventh-grade experience. Patterns of exposition and elements of style form the basis for the study of writing skills. Continuing attention is given to grammar and mechanics in relationship to student writing, and test preparation. Students will also complete a documented research paper.

**ENGLISH 12**

**5 CREDITS**

**12**

The senior World Literature program uses a series of readings by which a student can analyze and relate the individual to society, and develop a philosophy of self. Each work is subject to a study that covers information about the author, the time in which the work was produced, and the formal - or purely "literary" aspects of the work, be it an epic or drama or novel. Major attention is paid to composition and the principles of rhetoric. The fundamentals of logic, vocabulary, and types of literary criticism help the students to sharpen their analytical and critical abilities. Also, a unit in the use of the library and in the techniques of research culminates in a formal, documented paper required for graduation.

**AP ENGLISH 12: AP LITERATURE AND COMPOSITION**

**5 CREDITS**

**12**

This course is the final course in the **English Honors Sequence**. Students in this course are prepared to take the Advanced Placement test in English Literature and Composition. Students will be expected to be able to synthesize and evaluate information at a high level on Bloom's taxonomy. This senior honors course offers a challenging program in world literature from the ancient classics to contemporary readings, showing the development of human thought and imagination. The works are analyzed through close, inferential study, and these analytical skills are demonstrated in frequent critical essays and in the research paper, a requirement for graduation.

**AP LANGUAGE AND COMPOSITION**

**5 CREDITS**

**11-12**

This **elective** course is a comprehensive study of core reading and writing skills that will prepare students for college-level language and composition courses. A major part of this course includes connotation, imagery, figurative language, allusion, tone, rhythm, meter and pattern. Students learn how to discover meaning in literature by being attentive to language, image, character, action, argument, and the various techniques and strategies writers use to evoke responses from readers. Students are expected to justify their interpretations of literature (especially non-fiction) by reference to details and motifs found in the text, to compare their interpretations to those proposed by others (teachers, peers and published literary scholars), and to be prepared to modify their own interpretations as they learn to think more critically. Patterns of exposition and elements of style form the basis of the study of writing skills.

Rhetoric and mechanics will contribute to the development of student writing. Students who take this course will be prepared for the AP test given in the spring and will be encouraged to take it. **This course is open to students who have achieved an “A” in their previous year of English Enriched who are recommended by their teachers or students enrolled in our Honors English track.**

**PHILOSOPHY**

**5 CREDITS**

**10-12**

This year-long elective course is designed to familiarize the student with the development of Western philosophy from Ionian science to existentialism and modern analysis. The major goal is to develop the essential critical thinking skills of analysis, synthesis and evaluation by engaging the students in an investigation of the “Big Questions.” Areas to be explored are theories of knowledge, ethics and morality, politics and metaphysics. The writings of Plato, Aristotle, Aquinas, Hobbes, Rousseau and Nietzsche among others will provide the raw material for intense discussion and debate. These concepts will also be discussed in connection with many contemporary issues. Students will be expected to develop fluent verbal and written skills.

**JOURNALISM**

**5 CREDITS**

**9-12**

This course will give students a solid foundation in communications. In this elective, students will learn about print, broadcast and internet media with an emphasis on reporting techniques in the digital age. Students will learn what news is and will be introduced to effective ways of presenting news to the public along with the ethical decisions involved in reporting. Students will sharpen their interpersonal skills by interfacing with other students, faculty, and administrators on a regular basis. The skills introduced in this class will prepare students for career opportunities in any field including media and public relations, social media and corporate communications.

**THEATER ARTS I**

**5 CREDITS**

**9-12**

This course is designed for the novice drama student. The student will examine theater from its beginning to present Broadway productions. The course considers theater history, production styles, set and lighting design, audience, acting and performance over the years in relation to major playwrights and their works. Emphasis will be placed upon play reading, viewing, performance, analysis and understanding of selected full-length and one act productions both in and outside of the classroom.

**THEATER ARTS II**

**5 CREDITS**

**10-12**

This course is for the advanced drama student. The focus is on deepening students' understanding of theater as a collaborative art form. Through heightened expectations and more complex assignments, students further develop the skills begun in Theater Arts 1: theater history, acting and performance, technical design, and play writing. Students will be expected to read plays from varying time periods independently, write more fully-developed pieces, and to collaborate with Theater Arts 1 students in a leadership capacity.

**PUBLICATION SEMINAR (WV)**

**5 CREDITS**

**9-12**

Meeting in a classroom setting, students will study the principles involved in putting out a journalistic product and then apply those principles to the actual preparation and publication of the high school yearbook. Students develop interviewing and news writing skills. Students are evaluated by their degree of involvement and their skills as reflected in the quality of their projects. Teacher recommendation and page layout submission required.

**FILM STUDIES**

**5 CREDITS**

**10-12**

This course is designed to introduce students to the language of cinema in order to help them interpret film with a critical eye. Students will view films and discuss not only what is going on in front of the camera but also what is happening behind the scenes in terms of: camera angles, character development, cinematic technique, concept, dialogue, direction, editing, lighting, music, sequencing, special effects, etc.

**FILM STUDIES II**

**5 CREDITS**

**11-12**

This course will specifically focus on American film narratives and directors. Students will study four types of narratives prevalent in American film history: Westerns and the American Frontier, Forgotten History, American Experience and Identity, and Hollywood and the Romantic Comedy. Each unit examines at least two core directors and their films. Students will use the knowledge gained from Film Studies I about the elements of a film (lighting, cinematography, *mise en scene*, costumes, editing, etc.) and apply it to their study of films. Over the duration of the course, students will develop and mature so they can articulate an advanced reading of film by applying their understanding gained from the elements of film studied in Film Studies I. In addition to analyzing these films for their technical merit, the students will also examine and view these films from a societal and cultural lens. Prerequisite is Film Studies I.

**WRITING WORKSHOP (One Semester)**

**2.5 CREDITS**

**9-12**

This course will deepen the students' facility in writing by focusing on the processes of writing from brainstorming through publishing. Emphasis will be placed on the craft of revision with ample opportunity given to individualized writing instruction and peer critiquing. Time will be appropriated to address students' creativity.

**COLLEGE COMPOSITION I (One Semester)**

**2.5 CREDITS**

**11-12**

This course focuses on the stages of the writing process and includes a formal MLA research paper. A variety of writing and reading assignments are designed to develop analytical and critical thinking skills as they are applied to the writing process. Formal and informal writing tasks in this course will help students articulate their positions on a variety of topics and reinforce the incorporation of text based evidence in writing. **This course may be offered as Dual Enrollment. Students must meet testing/GPA criteria to earn credit from the college.**

**COLLEGE COMPOSITION II (One Semester)**

**2.5 CREDITS**

**11-12**

This course develops student writing by focusing on the writing process (drafting, revising, and editing). Each student is required to complete a process portfolio including 3-5 typed and revised MLA papers, informal writing assignments, and one formal research paper. All writing assignments develop critical thinking and writing skills. A variety of reading assignments, fiction and nonfiction, develop interpretive and close reading skills. **This course may be offered as Dual Enrollment. College Composition I is a pre-requisite.**



## **FAMILY AND CONSUMER SCIENCES**

Course Title	Grade Level	Credits	Course Level	Prerequisite
Foods I Intro	9-11	5	General	None
Foods II International	10-12	5	General	Foods I
Foods III Regional	11-12	5	General	Foods I & II; teacher recommendation
Foods IV Culinary Arts	12	5	General	Foods I-III
Fashion Clothing Design I (WV)	9-11	5	General	None
Fashion Clothing Design II (WV)	10-12	5	General	Fashion Clothing Design I
Fashion Clothing Design III (WV)	11-12	5	General	Fashion Clothing Design II
Fashion Marketing (WV)	9-12	5	General	None
Child Development I	10-11	5	General	Application Process
Child Development II	11	5	General	Child Development I; teacher recommendation
Child Development III-Project Teach	12	5	General	Child Development I & II; teacher rec.
Interior Decorating	9-12	5	General	None

### **FOODS I - INTRODUCTION TO FOODS AND NUTRITION**

**5 CREDITS**

**9-11**

This full year introductory course offers students an opportunity to learn individual and cooperative group applications in the Foods laboratory. Emphasis is placed on nutrition, knowledge of foods, food preparation, time, energy and resource management, career opportunities, and the resources available to learn about this important life skill.

### **FOODS II - INTERNATIONAL FOODS**

**5 CREDITS**

**10-12**

This second level food course offers students the opportunity to gain enhanced experiences in food preparation and presentation through the study of international foods. Students will prepare menus based on global cultures, traditions and food styles.

### **FOODS III - REGIONAL FOODS**

**5 CREDITS**

**11-12**

This third course of food studies offers students the chance to explore the foodservice industry and its related employment opportunities. Class activities will focus on planning, preparation, service and storage of a variety of food products, including cooking for special occasions and entertainment. Emphasis on the study of regional US foods will build upon the Foods II curriculum, connecting International Foods, our immigrant ancestors and our popular American diet.

### **FOODS IV- CULINARY ARTS**

**5 CREDITS**

**12**

This course is designed to provide advanced foods students the opportunity to showcase their specialty skills, as well as to encourage the pursuit of the commercial study and practice of food

preparation and presentation. Students will learn about the food service industry, including food, nutrition, marketing, sanitation, food costing, and methods of food preparation and presentation. A study of the commercial foods industry and related employment opportunities will be provided, with specific emphasis on post-secondary training, franchising and/or ownership responsibilities, marketing and other day-to-day operations required of a restaurateur.

**FASHION CLOTHING DESIGN I (WV)** **5 CREDITS** **9-11**

This course offers young men and women the opportunity to learn basic skills and techniques in sewing. The emphasis is on skill, use of the sewing machine and equipment, fabric selection, use and care of fabrics, sewing techniques needed for various fabrics and the successful completion of sewing projects.

**FASHION CLOTHING DESIGN II (WV)** **5 CREDITS** **10-12**

Students in Clothing II will further develop their insight into the world of fashion and develop the advanced skills necessary to create high fashion garments. Tailoring techniques will be covered with a special emphasis on altering and fitting, changing commercial patterns, finishing details, and application of linings, interfacings and underlining

**FASHION CLOTHING DESIGN III: PORTFOLIO DESIGN (WV)** **5 CREDITS** **11-12**

Fashion Design III is for advanced fashion students who have taken at least two classes in: Fashion Design, Fashion Figure Drawing, or Fashion Marketing. This course is designed for college bound students applying to a Fashion Design or Fashion Marketing program requiring a portfolio for entrance. The course will provide students an opportunity to develop original portfolio pieces that may include fashion design garments, fashion illustrations, and forecast trend boards that meet the requirements of the top fashion colleges. Students will also focus on interviewing skills, electronic portfolio submission, and coordinating a fashion show.

**FASHION MARKETING (WV)** **5 CREDITS** **9-12**

Fashion Marketing explores business aspects of the fashion world. It offers the opportunity to learn the process of analyzing, developing, and marketing current fashion trends into sales strategies. Fashion Marketing students will research current trends, the industry, people, and study why trends are popular. Throughout the course of the year students will create their own fashion company and design concepts including: a logo, label, hang tag, packaging, advertisements, a product launch, store merchandising, display, and layouts. Students will explore many fashion industry career options related to fashion and how to prepare for them.

**CHILD DEVELOPMENT I** **5 CREDITS** **10-11**

Students will study the physical, intellectual, social, and emotional growth of children during the preschool years. Students will have the opportunity to plan lessons and teach preschool children from the Wayne community. This is a hands-on experience especially for students considering a teaching career or a child related profession. **Due to the nature of this course, an application process is required for acceptance.**

**CHILD DEVELOPMENT II**

**5 CREDITS**

**11-12**

Child Development II prepares students to work in various child care positions and those students who choose to further their career in Early Childhood Education. Students will utilize their knowledge of education philosophies, curriculum planning, writing objectives and lesson planning to prepare and teach lessons to young children. Students in Child Development II will teach important concepts through education activities in the areas of art, storytelling, math, and science, as well as varied theme based experiences. Recommendation by the instructor is required.

**CHILD DEVELOPMENT III - PROJECT TEACH**

**5 CREDITS**

**12**

This senior level course is the culminating experience of the Child Development program. Child Development 3 will serve as a practical application of the concepts presented in these courses. Students will experience teaching at the elementary or middle levels through shadowing activities in the Wayne Public Schools of their choice. **This course is offered as a Dual Enrollment course.**

**INTERIOR DECORATING (WV)**

**5 CREDITS**

**9-12**

This course covers the financial aspects of selecting a home and its furnishings, the principles of color and design in theory and practice, the interpretation, evaluation and design of floor plans, the study of architectural and furniture styles, and individual house designs. Students have the opportunity to work with colors and decorating materials to work in groups and individually on creative projects.

# MATHEMATICS

Course Title	Grade Level	Credits	Course Level	Prerequisite
Algebra I	9-12	5	General	None
			Enriched	
Geometry	9-12	5	General	Algebra I
			Enriched	
Algebra II	9-12	5	General	Algebra I, Geometry
			Enriched	
Pre-Calculus	10-12	5	General	Algebra I, Algebra II, Geometry
			Enriched	
Unified Math III	9	5	Honors	Unified Math I & II
Unified Math IV	10	5	Honors	Unified I-III
Calculus	12	5	Honors	Pre-Calculus
AP Calculus AB	10-12	5	AP	Pre-Calculus Enriched or Unified IV
AP Calculus BC	11-12	5	AP	AP Calculus AB
AP Statistics	10**,11-12	5	AP	Algebra II or Unified III
Keys to Abstract Thought	9	5	General	None
College Algebra & Discrete Math	12	5	General	Algebra I, II, Geometry
Discrete Math w/ Applications	12	5	General	Algebra II

\*\*Only accelerated math students may take at this grade level

## ALGEBRA I

**5 CREDITS**

**9-12**

Relations and functions as defined by equations and inequalities are emphasized, as are the graphing of relations and functions, with a focus on linear and quadratic functions. Polynomials, factoring, properties of exponents, radicals, and their applications are also included in this course. The study of Algebra and its usefulness in solving real life problems will be emphasized. Graphing calculators will be incorporated throughout the course. **Students may not double up in Algebra I and Geometry.**

## GEOMETRY

**5 CREDITS**

**9-12**

Geometry utilizes the skills learned in Algebra to study concepts which develop logical thinking through deductive as well as inductive reasoning. Topics include proof, points, lines, planes, angles, triangles, properties of congruence and similarity, parallelism, perpendicularity, circles, polygons, solids, and trigonometry related to right triangles. A transformational approach will be utilized in developing concepts. The study of probability will also be emphasized. **Ninth grade students who have successfully completed Algebra I in grade 8 and earned a grade of B or above will be placed in this Geometry course.**

## ALGEBRA II

**5 CREDITS**

**9-12**

As the course title implies, Algebra II follows successful completion of Algebra I and Geometry. Algebra II builds on the material studied in the first year Algebra course. Additional topics

include: complex numbers, conic sections, matrices, polynomial functions, rational functions, exponential and logarithmic equations and graphs, sequences and series, and the Binomial Theorem. Emphasis is on modeling, analysis and application. Graphing calculators will be incorporated throughout the course.

### **PRE-CALCULUS**

**5 CREDITS**

**10-12**

Pre-Calculus is necessary to continue with higher mathematics and is exceedingly useful in various branches of the physical sciences. This course includes the study and the development of the mathematical concept of functions including elementary functions, composite functions, logarithmic functions, and exponential functions as well as a full semester of trigonometry. The six trigonometric functions are defined and applied to the solutions of triangles. Proving identities and solving trigonometric equations is emphasized. Formulas for the sum and difference of two angles, and double angles are developed and applied. Circular functions related to the trigonometric functions are studied, as are the graphs of the six functions. Graphing calculators will be incorporated throughout the course.

### **UNIFIED MATHEMATICS III**

**5 CREDITS**

**9**

The Honors Sequence is a challenging college preparatory program. Students enrolled in honors classes are expected to perform above grade level and to analyze critically and study material in-depth. Students will be expected to be able to synthesize and apply information at a high level on Bloom's taxonomy. Unified Mathematics III is the third course in our sequential honors program that expands the student's insight into the nature of mathematics. Polynomial and rational functions are studied in detail. A comprehensive study of geometry is completed. Exponential and logarithmic functions are introduced. All topics are explored from a numerical, graphical and analytical perspective. Graphing calculators will be incorporated throughout the course. **Students entering Unified Mathematics III should have successfully completed Unified Mathematics I and II with grades of "B" or better.**

### **UNIFIED MATHEMATICS IV**

**5 CREDITS**

**10**

The Honors Sequence is a challenging college preparatory program. Students enrolled in honors classes are expected to perform above grade level and to analyze critically and study material in-depth. Students will be expected to be able to synthesize and apply information at a high level on Bloom's Taxonomy. Unified Mathematics IV is the fourth course in our sequential honors program. A rigorous and comprehensive study of the elementary functions - polynomial, rational, exponential and logarithmic - and circular functions with numerical, graphical and analytical investigations is completed with an emphasis placed on the background needed to successfully transition to calculus. The complex number field is explored. The six trigonometric functions are defined and applied to the solutions of triangles. Proving identities and solving trigonometric equations is emphasized. Formulas for the sum and difference of two angles, and double angles are derived and applied. Circular functions related to the trigonometric functions are studied, as are the graphs of the six functions. Graphing calculators will be incorporated throughout the course. Sequences and series with an introduction to limits and the derivative complete the preparation.

**CALCULUS (HONORS)****5 CREDITS****12**

This course is specifically designed for those seniors who have successfully completed Pre-Calculus and wish to develop their understanding of the concepts of calculus and experience its method and applications. The course represents a multi-representational approach to calculus and the use of technology reinforces these representations. **Note: Students who take this course are not eligible for the Advanced Placement Calculus Examination.**

**AP CALCULUS AB****5 CREDITS****10-12**

AP Calculus AB is specifically designed for the college-bound student who has successfully completed Pre-Calculus – Enriched or Unified Mathematics IV. Topics include limits and continuity, differential and integral calculus including applications of the derivative and definite integral and a study of slope fields through separable differential equations. Graphing calculator technology is used throughout the course to enhance instruction. Students who take this rigorous course are eligible to take the Advanced Placement Calculus AB Examination toward securing possible college credits.

**AP CALCULUS BC****5 CREDITS****11-12**

The topical outline for AP Calculus BC includes all AP Calculus AB topics and an extensive study of topics that expand the methods of differentiation and integration. Parametric and polar curves are explored using derivatives and integrals in many application settings. The Maclaurin and Taylor Polynomials and Series and the Lagrange Error Bound for Taylor Polynomials are included. Graphing calculator technology is used throughout the course to enhance instruction. Upon completion of AP Calculus BC, the students are eligible to take the AP Calculus BC Examination toward securing possible college credits.

**AP STATISTICS****5 CREDITS****10\*, 11-12**

The purpose of the Advanced Placement Statistics course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students who successfully complete this course and the AP examination may secure college credits or advanced status. **\*Only students with accelerated status in Mathematics are eligible at this grade level.**

**KEYS TO ABSTRACT THOUGHT****5 CREDITS****9**

This course seeks to reinforce the building blocks of Algebra 1. The four key areas of the New Jersey Student Learning Standards covered are: Algebra, Functions, Number and Quantity, and Statistics and Probability. Students are provided an opportunity to explore previous content in greater depth through problem solving, projects, and basic skills reinforcement. This course is an accompaniment to the Algebra 1 general course.

**COLLEGE ALGEBRA AND DISCRETE MATH****5 CREDITS****12**

College Algebra and Discrete Math is a fourth year math course to be offered to seniors as an alternative to taking Pre-Calculus or for those who would benefit from additional Algebra work . The goal of this course is to prepare students for any first year math course they might take at the college freshman level. Fundamentals of algebra, geometry, and trigonometry are included in this course. The student builds upon this information to model real-world data and explores the topics in discrete math.

**DISCRETE MATH WITH APPLICATIONS****5 CREDITS****12**

This is a senior level mathematics course which serves as an opportunity for students to study applications of mathematics involving discrete rather than continuous mathematical models. Students will explore the foundations of logic, sets and functions, probability and statistics, and graph theory. This will serve as preparation for abstract thought required at the college level. **This course is offered as a Dual Enrollment course for college credit.**

## MUSIC

Course Title	Grade Level	Credits	Course Level	Prerequisite
Chorus	9-12	5	General	None
Chamber Choir	10-12	5	General	Audition w/ director
Symphonic Band	9-12	5	General	None
Woodwind Ensemble	10-12	5	General	One Year of Band/Instrumental Ins.
Brass Ensemble	10-12	5	General	One Year of Band/Instrumental Ins.
Percussion Ensemble	9-12	5	General	One Year of Band/Instrumental Ins.
Jazz/Rock Improvisation	9-12	5	General	Materials of Music I or instructor permission
Materials of Music I	9-12	5	General	None
Materials of Music II	10-12	5	General	Materials of Music I
Materials of Music III	11-12	5	General	Materials of Music I and II
Materials of Music IV	12	5	General	Materials of Music I-III
AP Music Theory	10-12	5	AP	Materials of Music I or instructor permission
Music Perspectives (WV)	11-12	5	General	None

### VOCAL MUSIC COURSES

#### CHORUS

**5 CREDITS**

**9-12**

The goal of this course is to develop the musical skills of students who enjoy singing. Students will perform music chosen to appeal to a wide variety of interests and ability levels, with an emphasis on developing proper vocal technique and the enhancement of basic musical skills. This course is open to all students—no previous experience, audition, or special approval is necessary. Activities, some of which may require participation outside of school hours, include performances and rehearsals, both in and outside of school, and class trips.

#### CHAMBER CHOIR

**5 CREDITS**

**10-12**

This course is designed to develop the experienced singer. Emphasis is on the development of musicianship through singing. Students meet daily for one period and rehearse repertoire from various genres. Performances include annual concerts and community outreach performances. Membership is open to students through audition with the director.

### INSTRUMENTAL MUSIC COURSES

#### SYMPHONIC BAND

**5 CREDITS**

**9-12**

Minimum requirement of three years' experience on a wind or percussion instrument, or approval of the band director is necessary. Music is chosen to appeal to a wide variety of interest and ability levels. Activities include concerts, parades and ceremonies. After school time is required. Though not mandatory, it is strongly encouraged that all students enrolled in "Symphonic Band" also participate in marching band. Students will have the opportunity to participate in instrumental instruction. **Due to space and equipment limitations, enrollment**



for certain instruments (i.e. Percussion) may be limited and will be determined by audition.

**WOODWIND ENSEMBLE**

**5 CREDIT**

**10-12**

This course is designed for players of woodwind instruments who enjoy small group and individual performance, solos, duets, trios, and quartets are performed with thought toward playing a variety of chamber music and improving technique. A minimum of six years of playing experience or approval of the director is required. Class members may perform at various concerts and community functions.

**BRASS ENSEMBLE**

**5 CREDITS**

**10-12**

This is a course designed for players of brass instruments who enjoy small group or individual performance. Solos, duets, trios, and quartets are performed with thought toward playing a variety of chamber music and improving technique. A minimum of six years playing experience or approval of the director is required. Class members may perform at various concerts and community functions.

**PERCUSSION ENSEMBLE**

**5 CREDITS**

**9-12**

This class offers the percussion player something different at all aspects of performance - keyboard percussion, timpani, snare drum, drum set, and accessories - will be included. A variety of music for soloists, duets, trios, and quartets suitable to the ability level of the class will be played. This course is designed for students who enjoy playing percussion instruments. Class members may perform at selected concerts and community functions. A minimum of six years playing experience or approval of the director is required

**JAZZ COURSES**

**JAZZ/ROCK IMPROVISATION**

**5 CREDITS**

**9-12**

This course is designed for instrumentalists who wish to learn how to improvise music (create their own solos) in jazz styles. Players of piano, guitar, bass, drums and wind instruments are encouraged to enroll (no beginners, please). In addition to performance techniques, the development of jazz from Ragtime through Dixieland, swing, bop, and jazz-rock to the modern era will be studied.

**MUSICIANSHIP COURSES**

**MATERIALS OF MUSIC I**

**5 CREDITS**

**9-12**

Minimum requirements are five years of performing experience on an instrument, or approval of the instructor. It is required that the student possess a working knowledge of basic notation (bass and treble clefs), and can read basic rhythms. Materials of Music I covers diatonic harmonization, ear training, music history, among other subjects. It is designed for those having a special interest in music and having some previous background in music.

**MATERIALS OF MUSIC II**

**5 CREDITS**

**10-12**

Topics addressed in Materials of Music II include contemporary music and the advanced topics of those begun in Music I: including chromatic harmony, advanced ear training, and advanced conducting.

**MATERIALS OF MUSIC III**

**5 CREDITS**

**11-12**

Areas included in Materials of Music III are acoustics, form, composition, and advanced theory.

**MATERIALS OF MUSIC IV**

**5 CREDITS**

**12**

Materials of Music IV address advanced arranging and composition. This course is also available as independent study.

**AP MUSIC THEORY**

**5 CREDITS**

**10-12**

This course will develop the student's ability to recognize and understand the basic materials and processes of music that are heard or read in a score. Extensive listening, with and without music scores, will be included and examples for analysis will consist of examples from different periods of music. The class will also cover computer applications in music, covering such subjects as MIDI, sequencing, notation, and simple compositional techniques using the computer. A solid foundation in the rudiments of music must be demonstrated for entry into the class.

**MUSIC SURVEY COURSES**

**MUSIC PERSPECTIVES (WV)**

**5 CREDITS**

**11-12**

This course is designed for the student who is not a musician but enjoys listening to music and discovering more about it. It is a general survey of different styles of music ranging from the 14<sup>th</sup> century to the present time. Current American popular music styles such as jazz, rock and roll, folk music, and musical comedy are included. **This course is offered as dual enrollment.**

## PHYSICAL EDUCATION/HEALTH

Course Title	Grade Level	Credit	Course Level	Prerequisite
Physical Education	9-12	3.75	General	Completion of prior year P.E.
Health 9	9	1.25	General	None
Health 10	10	1.25	General	None
Health 11	11	1.25	General	None
Health 12	12	1.25	General	None
Sports Medicine I	10-12	2.5	General	Biology
Sports Medicine II	10-12	2.5	General	Sports Medicine I

### PHYSICAL EDUCATION

**3.75 CREDITS**

**9-12**

The Physical Education Program is conducted on a mandatory basis. The students will receive instruction over a four-year period of time in wellness education, project adventure, weight training, team and individual sports. Freshmen and sophomores are required to take a project adventure course as well as health related and skill related fitness activities. All juniors and seniors receive a combination of fitness, team, and individual sport related activities with several wellness components.

### HEALTH 9 (One Marking Period)

**1.25 CREDITS**

**9**

Students will analyze and discuss various topics related to health and wellness. The following topics are included in this course: Relationships, reproductive anatomy, consequences of sexual activity, abstinence, birth control / contraceptives, decision making, peer pressure, self-esteem, mental illness, tobacco, alcohol, and drugs.

### HEALTH 10 (One Marking Period)

**1.25 CREDITS**

**10**

This **Driver Education** course is intended to provide current information and techniques on teaching novice drivers the basics of motor vehicle operation. The students will be made aware of the laws governing driving privileges and licensing in the state of New Jersey. This program will assist in the coordination of the minimum 30 hours of classroom instruction. Also the process of six hours of in-car instruction will be explained to all students. The students will be prepared to take the New Jersey State Written Examination.

### HEALTH 11 (One Marking Period)

**1.25 CREDITS**

**11**

The students in this course will have the opportunity to become certified in First Aid and CPR through the American Red Cross program. The topics for instruction include first aid and safety, CPR, heart health care, cancer awareness and treatment, nutrition, stress and fitness and issues related to tobacco, alcohol, and drugs.

**HEALTH 12 (One Marking Period)****1.25 CREDITS****12**

This course is designed to address, analyze, reflect and develop the student's personal attitudes and core values toward contemporary social issues. It will enable the students to design and implement a plan of action for appropriate decision making. Topics for instruction include value clarification in decision making, sexual health, AIDS as a communicable disease, relationships progressing from young adulthood into adult relationships and responsibilities, as well as issues and concerns of substance abuse.

**SPORTS MEDICINE I****2.5 CREDITS****10-12**

This course offers up-to-date evidence based techniques and current trends in health and fitness to students in a hands-on setting where they will explore different real world situations that would gear them for a potential future career in a variety of health care settings. This course format blends conventional lecture with a clinical classroom component that involves application of the lecture material. This course provides the student with the ability to assess different careers under the sports medicine umbrella. A main focus of the course will address prevention techniques as part of a fitness program to avoid common injuries and illness involving training techniques as well as protective equipment and environmental precautions. The course exposes students to emergency care of life threatening conditions and also provides the skills to assess different athletic injuries to all areas of the body. A review of functional anatomy is followed by discussions of the mechanisms of athletic injury, associated signs and symptoms, and the exercises and protocols to create a comprehensive rehabilitation program.

**SPORTS MEDICINE II****2.5 CREDITS****10-12**

Sports Medicine II advances the general knowledge base of the previous course and extends to a more practical/hands-on approach to caring for and treating athletic related injuries. The course reinforces learning about anatomy and kinesthetic functions and helps students learn to identify and differentiate various sports injuries. The course also reviews the goals of rehabilitation and emphasizes the importance of each of the steps in the rehabilitation process. Specific units review common lower and upper body injuries as well as spinal injuries and rehabilitation protocols for each of those injuries. There is also an overview of how many general medical conditions may affect athletic performance.

## SCIENCE

Course Title	Grade Level	Credit	Course Level	Prerequisite
Biology 1	9	5	General	Science 8
Biology E	9	5	Enriched	Science 8 (A-)
Chemistry 1	10-12	5	General	Biology and Algebra I or Geometry
Chemistry E	10-12	5	Enriched	Biology/Biology E Algebra/Algebra I E or Geometry/Geometry E
Physics 1	10-12	5	General	Algebra 1
Physics E	10-12	5	Enriched	Algebra 1
Biology for Allied Health	10-12	5	General	Biology/Biology E
Biotechnology	10-12	5	General	Biology 1/Biology E
Environmental Science	11-12	5	General	Biology and Chemistry
Ethical Issues in Science	10-12	2.5	General	Biology E or Biology 1
AstroBiology	11-12	2.5	General	Biology and Chemistry
Forensic Science	11-12	2.5	General	Biology and Chemistry
Science Research	9	2.5	General	None
Anatomy & Physiology	11-12	5	Honors	Biology E and Chemistry E
AP Biology	10-12	5	AP	Biology/Biology E and Chemistry/Chemistry E
AP Chemistry	10-12	5	AP	Algebra 2 and Chemistry E
AP Environmental Science	10-12	5	AP	Biology/Biology E and Chemistry/Chemistry E
AP Physics 1	10-12	5	AP	Algebra, Geometry and Algebra 2 or Unified Math
AP Physics 2	11-12	5	AP	Algebra, Geometry and Algebra 2 or Unified Math and Physics 1, Physics E or AP Physics 1
AP Physics C	11-12	5	AP	AP Physics 1 or 2 and Calc AB

### BIOLOGY

**5 CREDITS**

**9**

In this course, important biological questions and concepts are examined that include the origin and evolution of life; genetic continuity and principles of heredity; the relationships between structure and function in living organisms; biochemical processes; behavior; and the preservation of life in changing ecosystems. These topics serve as unifying themes along with an emphasis placed on the unique position of man to his environment. Laboratory experiences aid the student to learn and practice science as a system of inquiry. This course includes laboratory work and experiments that are both qualitative and quantitative in nature to provide students with opportunities to gather and interpret data.

### CHEMISTRY

**5 CREDITS**

**10-12**

The College Preparatory Enriched sequence is designed for students who are at or above grade level and have a strong work ethic. This course prepares students for college work at a more rigorous pace. In this course, students will learn about the ultimate structure of matter and how

knowledge of this structure will allow them to interpret the wide variety of behavior observed during physical and chemical changes. Mastering of chemical facts will be required. Laboratory experiments are all of a quantitative nature and based on gathering and analyzing data. Students must have advanced mathematical capability that includes skills in understanding and analyzing ratio, proportion and percent problems, algebraic equations, and scientific notation.

### **PHYSICS**

**5 CREDITS**

**10-12**

Physics is the study of matter and energy and the concepts developed here are true virtually everywhere in the universe. This course is recommended for students who have an interest in science, architecture, medicine, or engineering. The program starts out with an in-depth treatment of Newtonian mechanics, or the study of one-dimensional and two-dimensional motion and forces. This is followed by a study of energy and waves with a focus on sound and light. Fundamental concepts evolve via lecture, discussion and laboratory investigations - all of which are enriched by hands-on activities, computer simulations, demonstrations, and animations.

### **BIOLOGY FOR ALLIED HEALTH**

**5 CREDITS**

**10-12**

This course is designed to benefit students interested in biomedical and health related careers. Students are introduced to biosciences, and skills utilized in biomedical research. Anatomy and physiology and medical terminology are emphasized as well as topics that include cells, biochemistry, disease, microbiology and pathogenic organisms, infections, metabolism and nutrition, development and birth, and body defenses and immunity. In addition, students will consider topics in bioethics and medical genetics. The course format focuses on lecture, discussion, and relevant class activities.

### **BIOTECHNOLOGY**

**5 CREDITS**

**10-12**

Students will explore the fundamental principles of biotechnology and business applications. Units of study include: plant tissue culturing; plant and animal agriculture; DNA, RNA, and protein technologies; genetic diagnostics; healthcare and pharmaceuticals; food processing (GMO's); energy and environmental management; forensic science; cloning; stem cells; and bioethics. This course would be appropriate for any Science major or serve as an introduction to a college Science elective.

### **ENVIRONMENTAL SCIENCE**

**5 CREDITS**

**11-12**

The course in environmental science will provide students with knowledge to intelligently discuss environmental issues. Students will understand the creation of the Earth and its place in the universe. The subject incorporates interdisciplinary information to comprehend that the Earth has been constantly changing for over 4 billion years. The topics and presentation provide opportunities for students to understand and analyze the current environmental condition of the planet as well as the local community and metropolitan area. There will be an effort to focus the impact of technology/human effects on the environment. In addition, topics offer discussions on the ecological balances of nature and the environment quality for the future. Emphases of environmental science include the development of awareness of current

environmental issues; the development of greater appreciation and concern for the natural world; the development of knowledge and understanding of our natural resources; the development of positive attitudes and sensitivity regarding the significance of ecological interactions; and the development of an awareness of social and political mechanisms available for conservation, restoration, and preservation of the environment. The course in Environmental Science will involve teacher directed presentations of content areas through class lecture, class discussion, student reports, investigations, and class group activities. In addition, laboratory exercises will supplement and enhance topics dealing with both ecosystem functions and species interactions. Instruction will involve incorporation of current topics through reading and audiovisual presentations.

### **ETHICAL ISSUES IN SCIENCE**

**2.5 CREDITS**

**10-12**

Students will explore and consider ethical issues that manifest from advances in science and medicine. Students will examine decision making and public policy in science related fields.

Units of study include: genetic testing & genetic research; animals in research; humans in research; stem cell research; vaccines; ethical issues in medicine, the principles of non-maleficence, beneficence, autonomy, and justice. This course will challenge students to engage in discussions that require analytical thinking within science and the society in which it serves with global implications. This course would be appropriate for any Science major or any student who was interested in health or legal related fields.

### **ASTRO BIOLOGY**

**2.5 CREDITS**

**11-12**

The AstroBiology course is a multidisciplinary laboratory-inquiry based incorporation of biological, space science and environmental topics. This course integrates principles of astronomy and space exploration with biological topics that include the physiology of man in space, life characteristics and habitats on earth and beyond, and the potential and search for extraterrestrial life forms in the universe. The student will also investigate relationships between astronomical events and the biosphere's environments and life forms. To gain a wider understanding and a greater appreciation of the world in which we live, the student will engage in a variety of activities, project work and research within the framework of a highly structured interdisciplinary approach. In addition, the student will be exposed to career opportunities in these inter-related science disciplines.

### **FORENSIC SCIENCE**

**2.5 CREDITS**

**11-12**

The Forensic Science course applies biology, chemistry, physical science, and technology to the analysis of criminal acts and law enforcement. Forensic Science is offered as a half-year elective course to students who have successfully completed biology and chemistry or have a comparable science background. The course focuses on development of critical thinking and the examination of evidence as they relate to crimes and case studies. Law enforcement agencies have expanded their investigative functions, and rely on advice and technical support from the scientific community. Forensic Science is the application of science process and content knowledge to laws that are enforced by police departments and other law enforcement agencies. Students will apply scientific methods and employ related science disciplines to consider aspects of evidence relevant to crime scenes. Students will also consider the

functions of a typical crime laboratory. The course will involve presentations, discussions, projects, laboratory investigations, use of technology, and readings. In addition, the student will be exposed to career opportunities in the area of criminalistics and forensic science.

### **SCIENCE RESEARCH**

**2.5 CREDITS**

**9**

The Science Research course applies the scientific method and the use of technology to design, complete, and present experimental projects that involve biological and physical science topics of interest. Science Research provides students with opportunities to gain scientific knowledge and understanding. The course focuses on the processes of science and the development of critical thinking. Students plan and conduct investigations, as well as analyze original data. Science Research provides students with opportunities to develop and use the skills of observing, hypothesizing, experimenting, and communicating. The course involves presentations and discussions, and is primarily project-based. Students will gain experience in conducting a literature search of a specific science topic as well as complete projects, and present a formal scientific research paper.

### **ADVANCED COURSES AND ADVANCED PLACEMENT**

Advanced science courses may be taken in addition to but not instead of any of the three core Biology, Chemistry and Physics courses. This may be accomplished if the student can “double up” in science during his/her freshman, sophomore, junior and senior year. Students serious about science as a possible career choice should seek advice and assistance from the science department supervisor at program planning time. While the scope of the advanced high school programs in Biology, Chemistry and Physics is not as fully inclusive as it might be in similar freshman college courses, the level of treatment in the areas of concentration should provide ample challenge, useful background, and a feeling for what is expected in attitude and responsibility from mature students preparing themselves for careers in science. College texts, laboratory guides, reference materials and testing procedures are used throughout the advanced course.

### **ANATOMY & PHYSIOLOGY (HONORS)**

**5 CREDITS**

**11-12**

The course in human anatomy and physiology presents students with an in depth view of the functional systems of the human body to include the nervous, endocrine, digestive, circulatory, respiratory, excretory, reproductive, and locomotive systems. Throughout the course material, there is an emphasis on the coordinated interaction of physiological activities. The topics incorporate the significance of the nervous and endocrine systems that regulate the responses between and within other systems. Students examine each system from levels of cell specialization and organ structure. The overall performance of the human body is viewed as an interconnected complex of structures working on molecular and gross levels. The course exposes students to current biomedical and social environmental issues to enhance their understanding of health and human body related topics. The course in Anatomy and Physiology will involve teacher directed presentations of content areas through class lecture, class discussion, student reports, investigations, and class group activities. In addition, laboratory exercises will supplement and enhance topics dealing with both system functions (physiology) and system structure (anatomy). Instruction will involve incorporation of current



topics through reading and audiovisual presentations. **Note: Seniors have registration priority in this course. Course may be offered as a dual enrollment option.**

### **AP BIOLOGY**

**5 CREDITS**

**10-12**

Building on a foundation provided by first year Biology and Chemistry, enriched for both courses is highly recommended, the course in advanced Biology aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Heavy content emphasis is placed on biochemistry, cytology, energy transformations, molecular genetics, heredity, and evolution. The course focuses heavily on application based analysis of the material and inquiry based laboratory experimentation. Students are required to analyze data, design their own labs, and apply experimental knowledge to concepts taught in class. A heavy emphasis is placed on analytical and higher level scientific writing. AP Bio labs equate to the types of practical work done by college freshmen.

### **AP CHEMISTRY**

**5 CREDITS**

**10-12**

This course is planned to meet the objectives of a general chemistry course on the college level. The emphasis is on rigorous training in fundamental concepts required as preparation for future study in chemistry or in related fields. Atomic structure, chemical bonding, reaction kinetics, equilibrium, oxidation-reduction, electrochemistry and acid based relationships are thoroughly treated. All laboratory work stresses mastery of quantitative laboratory techniques.

### **AP ENVIRONMENTAL SCIENCE**

**5 CREDITS**

**10-12**

The AP Environmental Science course explores Earth as a highly complex and dynamic system, and its interrelationship with humanity. This academic journey will be investigated through many lenses, including cultural, biological, economic, and legal viewpoints. Students will learn about a wide breadth of topics from environmental ethics to energy production, to ecology, all with an emphasis on how each topic studied is related to every other topic. Through participating in this course students will develop a greater mastery of the scientific principles, concepts, and methodologies required to understand the many nuanced interactions between humans and the natural world; Students will also acquire the knowledge and practice needed to identify and analyze environmental problems both natural and human-made; to evaluate the relative risks associated with these problems; and to examine alternative solutions for resolving and/or preventing them. Themes include: science as a process; energy conversions that underlie all ecological processes; the earth itself as one interconnected system; human alteration of natural systems; environmental problems with cultural and social context; and how humanity's success depends on developing practices that will achieve sustainable systems. The laboratory and field investigation component of the AP Environmental Science course is to complement the classroom portion by allowing students to learn about the environment through firsthand observation and inquiry-based experimental design. **Note: Seniors have registration priority in this course.**

**AP PHYSICS 1****5 CREDITS****10-12**

This is an in-depth first year physics course taught at an advanced placement level that targets serious students who show an interest and a proclivity for science, medicine, engineering, architecture, or related fields. It is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy and power; mechanical waves and sound. It will also introduce static electricity and electric circuits. Students should be comfortable with algebra topics including solving equations, graphing linear functions, and trigonometry. This course provides an academic challenge for serious minded science students interested in building confidence through success with college level study and with the Advanced Placement College Board exam in AP Physics 1.

**AP PHYSICS 2****5 CREDITS****11-12**

This is an in-depth second year advanced placement level physics course targeting serious students who show an inclination and a proclivity for science, medicine, engineering, architecture, or related fields. This course is the equivalent of a second –semester college course in algebra-based physics. Content includes fluid mechanics, thermodynamics, electricity and magnetism, optics, atomic and nuclear physics. This course provides an academic challenge for serious minded science students interested in building confidence through success with college level study and with the Advanced Placement College Board exam in AP Physics 2.

**AP PHYSICS C****5 CREDITS****11-12**

Advanced Placement Physics C is a college-level class offered to qualified students who show an inclination and a proclivity for science, medicine, engineering, architecture, or related fields. The Advanced Placement Physics C course is designed to complement and supplement the introductory Advanced Placement Physics 1 (or Advanced Placement Physics 2) course pursued by college-level students. Strong emphasis is placed on solving a variety of challenging problems, most requiring calculus. The subject matter of the Advanced Placement Physics C course is principally mechanics, electricity and magnetism.

**Note:** Students who request Advanced Placement Physics 2 or Advanced Placement Physics C are registered according to their mathematics background and their college/career plans. Students who have completed a first year of Calculus and interested in physics or engineering are registered in Advanced Placement Physics C, and students who have completed Pre-Calculus without a year of Calculus are registered in Advanced Placement Physics 2.

## TECHNOLOGY EDUCATION

Course Title	Grade Level	Credits	Course Level	Prerequisite
CAD I: Intro to Design	9-11	5	General	None
CAD II: Architectural & Eng. Design	10-12	5	General	CAD I
CAD III: Adv. Design/Portfolio Prep	11-12	5	General	CAD I and II
CAD IV: Design Experience	12	5	General	CAD I - III
Intro. To Automotive Systems	9-11	5	General	None
Auto Occ. Suspension & Brakes	10-12	10	General	Intro to Auto
Auto Occ. Heat/Air/Electrical	10-12	10	General	Intro to Auto
Auto Occ. Engine Performance	10-12	10	General	Intro to Auto
Auto Occ. SLE	12	10	General	Intro to Auto; B average in Auto classes
Wood Technology I (WV)	9-12	5	General	None
Advanced Woods (WV)	10-12	5	General	Wood Tech I
Fabrication Technology	9-12	5	General	None
Graphic Design I	9-11	5	General	None
Graphic Design II	10-12	5	General	Graphic Design I
Graphic Design Occupations	11-12	5	General	Graphic Design I and II
Graphic Design Layout/Pub. (WH)	9-12	5	General	None
Photography I	9-11	5	General	None
Photography II	10-12	5	General	Photography I
Photography III (WH)	11-12	5	General	Photography I and II
AP Photography IV (WH)	12	5	AP	Photography I-III; teach rec
Robotics I	9-11	5	General	None
Robotics II	10-12	5	General	Robotics I
Robotics III	11-12	5	General	Robotics I & II
TV Production I	9-11	5	General	None
TV Production II	10-12	5	General	TV I
TV Production III	11-12	5	General	TV I and II and teacher rec.
TV Production IV	12	5	General	TV I-III and teacher rec.
Digital Media Projects Team	10-12	5	General	See Course Description

### **CAD I: INTRO TO DRAFTING DESIGN AND PROBLEM SOLVING 5 CREDITS 9-11**

This course introduces the student to the use of drawing as the language of industry and provides the opportunity to prepare various types of technical and computer drawings. These skills will be applied to a broad range of experiences where students will develop a diverse portfolio that includes industrial and architectural designs. This course is the basis upon which all other Computer Aided Design Studio courses are sequentially developed. It is recommended for all students who have interests in architecture, engineering, construction management, interior design, environmental design, fine arts, and virtual reality.

**CAD II: ARCHITECTURAL AND ENGINEERING DESIGN****5 CREDITS****10-12**

Students work on a series of projects where they assume the roles of engineer, architect, and industrial designer. They continue to learn industry specific design standards, and learn best practices for using a variety of 3D modeling programs. They bring their ideas to life with digital fabrication technologies like 3D printing and laser cutting. Students may choose to refine their projects as a part of their ongoing college admissions portfolio development program. **This course is offered as a Dual Enrollment course for college credit.**

**CAD III: ADVANCED DESIGN/PORTFOLIO PREPARATION****5 CREDITS****11-12**

Students in this course complete a series of advanced modeling and design challenges. They are encouraged to pursue their specific design interests as they develop their personal style in a studio setting that encourages creativity and independent thought. They continue to master the latest 3D modeling technologies for engineering, architecture, video game / interactive design, and industrial design, and they prepare for professional software certification exams. They continue to explore 3D printing and laser cutting, and they are introduced to third party services that allow them to mass produce their designs. Students may choose to refine their projects as a part of their ongoing college admissions portfolio development program. **This course is offered as a Dual Enrollment course for college credit.**

**CAD IV: INDEPENDENT DESIGN EXPERIENCE****5 CREDITS****12**

Students in this course learn advanced 3D modeling techniques to prepare them for future academic and professional challenges. They learn how to design scripts to rapidly generate, study, compare, and fabricate multiple design iterations. They investigate CGI techniques used by the entertainment industry to create photorealistic renderings of their digital models. Students have the opportunity to complete a thesis project and/or continue to prepare for professional software certification. Students may choose to refine their projects as a part of their ongoing college admissions portfolio development program.

**INTRODUCTION TO AUTOMOTIVE SYSTEMS****5 CREDITS****9-11**

Class periods are a mix of lecture and lab work, to enable students to gain understandings in both theory and practical applications of the basics of ignition, fuel, cooling, and lubrication systems. Also, electrical circuits, starting and charging, power transmission, suspension systems, steering and brakes, are introduced in this class. **This course is a prerequisite for all subsequent auto occupation classes. This course may be offered as a Dual Enrollment course for college credit.**

**AUTO OCCUPATIONS:  
STEERING, SUSPENSION, AND BRAKES****10 CREDITS****10-12**

Students who have selected the automotive industry as a possible occupation should consider this class. Students are given related instruction using the latest diagnostic tools and equipment. Students will be trained to troubleshoot and repair automotive steering and 41 suspension

systems, as well as automotive brake systems. This class covers subject matter that could lead to ASE certification in the Steering and Suspension, as well as Brake areas. This course is also available as a 5 credit course for seniors in an Automotive SLE. **This course may be offered as a Dual Enrollment course for college credit.**

**AUTO OCCUPATIONS: ELECTRICAL/ELECTRONICS**                      **10 CREDITS**                      **10-12**  
**AND HEATING/AIR CONDITIONING**

Students who have selected the automotive industry as a possible occupation should consider this class. Students are given related instruction using the latest diagnostic tools and equipment. They will be trained to troubleshoot and repair automotive electrical and heating and air conditioning systems. This class covers subject matter that could lead to ASE certification in Heating and Air Conditioning and Electrical and Electronics. This course is also available as a 5 credit course for seniors in an Automotive SLE. **This course may be offered as a Dual Enrollment course for college credit.**

**AUTO OCCUPATIONS: AUTOMOTIVE**    **10 CREDITS**                      **10-12**  
**ENGINE PERFORMANCE**

Automotive Engine Performance will continue teaching the student about the automobile and the internal combustion engine. A major focus will be on engine performance and diagnosis. In this time of environmental awareness and concern it is important to understand what makes the vehicle perform at an optimum level to produce the highest efficiency at the lowest pollution levels. This course is designed to prepare students to take the ASE certification test in the area of Engine Performance. ASE program standards and guidelines are followed during the course. This course is also available as a 5 credit course for seniors in an Automotive SLE. **This course may be offered as a Dual Enrollment course for college credit.**

**AUTOMOTIVE STRUCTURE LEARNING EXPERIENCE**    **10 CREDITS**                      **12**

A 12th grade option for Advanced Automotive Technology students who have maintained a B average, satisfactory attendance in previous automotive classes, and are committed to an automotive career. Students will find employment with local automotive employers willing to participate in the work study program, or with program Advisory Board members. They will attend classes in the morning, and then leave school to be at their workplace in the afternoon. As per State regulations for participation, there will be a workplace visit from the instructor every 10 working days that will include a conference with the student's employment supervisor. In addition to the 10 credits students receive for the course, students also receive paid compensation from their employer. State laws regarding compensation, workplace safety, and child labor must all be strictly adhered to while participating in this class.

**WOOD TECHNOLOGY I (WV)**    **5 CREDITS**                      **9-11**

This course is designed to include planning, layout, problem solving and measuring skills, use and identification of wood, safe use of hand and power tools, basic joinery and finishing operations. Emphasis is placed upon preparing students for life-long learning, insights and understanding of our technological society.

**ADVANCED WOODS (WV)****5 CREDITS****10-12**

This course is designed to give students advanced experiences in cabinet making, furniture making, wood craft, and home construction. Production techniques included in mass production, and advanced finishing procedures will be presented. Emphasis will be placed on increased student independent thinking, planning and problem solving.

**FABRICATION TECHNOLOGY****5 CREDITS****9-12**

This course is designed as a hands-on creative design experience where the students will focus on problem solving and the practical application of the solutions to those problems. Students will be given a problem, often based on real world issues found here at school and in the community, work collaboratively in groups to solve it, and then they will create and document the solution/prototype using materials such as wood, metal, and plastic. Students will be exposed to using 21<sup>st</sup> Century computer controlled machinery as well as traditional high school woodworking tools and machinery.

**GRAPHIC DESIGN I****5 CREDITS****9-11**

Graphic Design I is an area of study devoted primarily to the organization and design of visual materials. The course covers units in design and desktop publishing for printed material and on-line purposes. This course centers on the concept of mass communication in traditional and fully digital methods.

**GRAPHIC DESIGN II****5 CREDITS****10-12**

A course designed to provide in-depth study and experience in the field of visual communication. Students will be provided with career and occupational information. Opportunities will exist for students to further develop skills and build upon the knowledge gained in Graphic Design I.

**GRAPHIC DESIGN OCCUPATIONS****5 CREDITS****11-12**

Graphic Design Occupations is the study of visual reproduction processes. Students will continue to develop basic skills from participation in activities that simulate realistic experiences in the field of visual communication. The areas covered include design, composition, desktop publishing, reproduction photography, photography.

**GRAPHIC DESIGN LAYOUT/PUBLICATIONS(YEARBOOK) (WH)****5 CREDITS****9 -12**

Students will study the principles involved in putting out a printed product and then apply those principles to the actual preparation of the high school yearbook. Skills in the areas of editing, layout, graphic design, and photography, creative writing, business and marketing skills will be explored. Students' skills are evaluated by the degree of involvement as reflected by the quality of their projects. This course is also designed to explore and apply graphic design and

photographic principles as a vital form of creative expression and communication. Subject matter covers the artistic, technical and practical aspects of contemporary photography. Emphasis is placed on techniques of digital photography. Students will create images representing a variety of challenging subjects and visual concepts.

**PHOTOGRAPHY I**

**5 CREDITS**

**9-11**

This course is designed to explore and apply photographic principles as a vital form of creative expression and communication. Subject matter covers the artistic, technical and practical aspects of all types of photography through the investigation and the use of both film and digital cameras and post production software (Adobe Photoshop). Students will learn the basics of using the manual setting on the digital camera and the use of studio equipment. The student will use the design and problem solving model, think critically and creatively to capture images representing a variety of challenging subjects and visual concepts which will be presented in a final portfolio.

**PHOTOGRAPHY II**

**5 CREDITS**

**10-12**

This course is designed to encourage and facilitate artistic and technical skills for the intermediate photography student. The emphasis of this course is on fine art photography as demonstrated in various art forms. Students will utilize the manual settings of a digital camera and post production software (Adobe Photoshop) to emphasize creative ability, imagination and experimentation. Students will also research and investigate the work of famous professional photographers and emulate their style as a jumping off point in the design and problem solving model for their work. Students will think critically and creatively in order to capture images representing a variety of challenging subjects and visual concepts which will be presented in a final portfolio while also gaining presentation and exhibition skills.

**PHOTOGRAPHY III**

**5 CREDITS**

**11-12**

This course is designed to encourage and facilitate artistic and technical skills for the advanced photography student. The emphasis of this course is on all types and styles of photography, and studio lighting. Students will utilize the manual and creative settings of a digital camera, post production software (Adobe Photoshop and Adobe Lightroom) and professional lighting to demonstrate creative ability in a large variety of photographic applications. Students will continue to research and investigate the work of famous professional photographers who practiced cutting edge artistic and commercial work as a jumping off point for their work.

Students will continue to use the design and problem solving model, think critically and creatively to capture images representing a variety of challenging subjects and visual concepts which will be presented in a formal portfolio. **This course is offered as a dual enrollment course.**

**AP PHOTOGRAPHY IV (AP 2-D ART AND DESIGN)**

**5 CREDITS**

**12**

This course is designed to allow the advanced photography student to put together a body of work to prove their photographic competencies at the AP level. Students will apply their three years of previous photography experiences to work to the standards set forth by the College

Board for creating a portfolio that meets the criteria for AP Studio Art: 2D Design credit. Students will utilize the Elements of Art, Principles of Design, Fundamentals of Composition, Commercial Lighting, and Post Production Software as tools to create strong images for the advertising, marketing, and visual arts career clusters. **In order to take this course, students must complete Photography I-III and have a Photography teacher's recommendation.**

**ROBOTICS I**

**5 CREDITS**

**9-12**

During this course, students investigate the mechatronics approach to robotics design. Roboticists are well-versed in the interdependency of design, visualization, fabrication, electronics, and computer science. They use engineering modeling software to create a virtual prototype of their robot, and use digital fabrication tools to generate physical parts. After they assemble the components, they learn how to design electronic systems for manual and autonomous control. By the conclusion of the course, they have programmed microcontrollers to impart their robots with more sophisticated sensing and control capabilities.

**ROBOTICS II**

**5 CREDITS**

**10-12**

Students enrolled in the second year of the Robotics sequence continue to develop their knowledge of design, fabrication, electronics, and programming. They use engineering modeling software and digital fabrication tools to design and develop prototypes of robotics components. They take advantage of electronics and programming techniques to allow their robots to perceive their environment, communicate, and make decisions. As the year progresses, students engage in a series of mechatronics design challenges.

**ROBOTICS III**

**5 CREDITS**

**11-12**

During this course, upperclassmen apply their knowledge of mechatronics in response to a design challenge. They work in project teams to research the problem at hand and develop potential solutions via mechanical dissections and advanced prototyping techniques. As they complete the challenge, they explore topics in planning, project management, testing, and documentation. Post-secondary academic and professional topics are discussed throughout the course. **This course may be offered as a Dual Enrollment course for college credit.**

**TELEVISION PRODUCTION I**

**5 CREDITS**

**9-11**

This full year elective concentrates on basic television production theory and studio production. Working and rotating as a crew member, students will learn communications theory, basic terminology, planning, producing, directing, script writing, camera, video, audio, editing, graphics and lighting. Individual projects will allow students to act as talent and also direct their own productions. Genres explored include the documentary, interviews, music videos, news, commercials, and more. There are frequent screenings of the best in film and television. Students are encouraged to look at the media with a critical eye and are guaranteed to never see the world the same way again.

**TELEVISION PRODUCTION II**

**5 CREDITS**

**10-12**



Building on previous television production experience, students go outside of the studio and are introduced to field production and editing. Through basic exercises and group productions, students learn advanced shooting techniques using portable cameras and equipment. Students also learn the art of non-linear editing and edit their material on Apple computers using Adobe Premiere. Screenings range from the earliest historic films to the latest Hollywood has to offer and explore the development of film language, continuity, and the use of the camera to tell a good story. Projects include video scavenger hunts, parts of the whole, sports music video editing, man-on-the-street, short narrative film, public service announcements and the magazine piece.

**TELEVISION PRODUCTION III**

**5 CREDITS**

**11-12**

The goal of this third year elective course in television production is to take previous television experience and apply it towards student produced and directed regular and special programming for cable television and other forms or distribution. Students will also document and produce in –house programs for special interest to their school and educational experience. Special attention will be directed toward the production of short magazine style pieces including planning writing, shooting, and editing. The creation of appropriate graphics, the use of the computer as a tool for television production, and all elements of non-linear editing will form the technical core of this curriculum. Readings, screenings, critiquing, guest speakers and field trips will complement the workshop environment. Students will also be responsible for editing together a reel of their work to be used as a resume.

**TELEVISION PRODUCTION IV**

**5 CREDITS**

**12**

This engaging, hands-on course is offered in a workshop environment that replicates the real life activities of an actual broadcast studio. Advanced editing techniques, including the implementation of Adobe After Effects, will be stressed. All student activities will be directed toward the production of broadcast quality programming for various digital outlets including YouTube and will include the following: Video Yearbook, Morning Announcements, and Freshman Orientation Videos.

**DIGITAL MEDIA PROJECTS TEAM (WV)**

**5 CREDITS**

**10-12**

Students will be able to implement project management techniques while also providing the district with essential and necessary advertising materials. The Digital Media Project Team will serve as a central “one-stop shop” to fulfill orders for district promotional products. Students will be responsible for executing work orders for promotional materials while learning the project management process through instructional unit planning. Students are required to have taken at least one level of a related field course. These include: TV Production, Graphic Design, Photography and CAD (A co-requisite in one of these areas is recommended). Applied Technology Teacher recommendation is required.

## WORLD LANGUAGES

Course Title	Grade Level	Credits	Course Level	Prerequisite
French I	9-12	5	Enriched	None
French II	9-12	5	Enriched	French I
French III	10-12	5	Enriched	French I and II
French IV Honors	11-12	5	Honors	French I-III
French V Honors	12	5	Honors	French I-IV
Italian I	9-12	5	Enriched	None
Italian II	10-12	5	Enriched	Italian I
Italian III	10-12	5	Enriched	Italian I and II
Italian IV Honors	11-12	5	Honors	Italian I – III
Italian V Honors	12	5	Honors	Italian I – IV
Spanish I	9-12	5	General	None
			Enriched	
Spanish II	9-12	5	General	Spanish I
			Enriched	
Spanish III	10-12	5	General	Spanish I and II
			Enriched	
Spanish IV Honors	11-12	5	Honors	Spanish I – III Enriched
Spanish V Honors	12	5	Honors	Spanish I – IV Enriched

### **FRENCH I**

**5 CREDITS**

**9-12**

Students selecting the first year course in French are introduced to the fundamentals of the language and the culture of France. The students have the opportunity to express themselves to begin to build fluency in the language through daily conversation and maximum usage of French in the classroom. Opportunities are provided for speaking in the interpersonal, interpretive and presentational modes in accordance with the content standards.

### **FRENCH II**

**5 CREDITS**

**9-12**

The second year course in French begins with a review of French I material. Students then complete the basic grammar content, add to their vocabulary, improve their communication skills and increase their knowledge and understanding of the people and customs of France. Instruction relates practices and products to the perspectives of the target culture in accordance with the content standards. In addition, students are exposed to the many career options open to speakers of French.

### **FRENCH III**

**5 CREDITS**

**10-12**

Students in their third year of French are exposed to a combination of vocabulary building, advanced grammar, composition work, and conversational practice. The students' introduction to French literature begins by reading excerpts from authentic works. The culture and geography of France and French speaking countries are treated, as is the importance of the French language in today's job market.

**FRENCH IV HONORS****5 CREDITS****11-12**

The fourth year of French emphasizes more advanced reading, vocabulary building, conversation, and refinement of advanced grammar. History and literature are studied simultaneously for a better understanding of France's influence and importance in the world both past and present. Contemporary French culture is treated in a manner to provide insight into the French language and people, relating practices, products and perspectives of the target culture.

**FRENCH V HONORS****5 CREDITS****12**

French V will be taught by means of discussion, reading, writing, vocabulary/grammar/literature-related exercises, oral-aural communication, critical thinking exercises and cooperative activities. The emphasis will be placed on demonstrating an intermediate proficiency according to the ACTFL proficiency guidelines. Culturally authentic French materials will be utilized for comparisons, analysis, and/or summations.

**ITALIAN I****5 CREDITS****9-12**

Students in first year Italian are presented with the fundamentals of the language and the culture of Italy. Basic grammar and vocabulary are stressed and conversational skills are introduced. Students are given the opportunity to speak in the interpersonal, interpretive and presentational modes in accordance with the core content standards. Reading selections and classroom discussions familiarize students with the culture and civilization of Italy.

**ITALIAN II****5 CREDITS****10-12**

The second year of Italian begins with a review of material presented in Italian I. Students continue the study of grammar, increase their vocabulary, improve their conversational and writing skills and increase their knowledge of the people and customs of Italy. Instruction relates practices and products to the perspectives of the target culture in accordance with the content standards. Students also learn about the various career options available to speakers of Italian.

**ITALIAN III****5 CREDITS****10-12**

The third year of Italian focuses on the refinement of the communication skills developed in the first two years. Vocabulary building, advanced grammar, conversation and writing practice will be treated within the literary framework. An introduction to basic Italian literature, history, culture and geography is presented.

**ITALIAN IV HONORS****5 CREDITS****11-12**

Italian IV students concentrate on improvement of communication skills and building of a greater working vocabulary. Students develop an appreciation for Italian culture and civilization through authentic literary texts and authentic print material. They will be expected to express themselves

at a more sophisticated level through the interpersonal, interpretive and presentational modes in accordance with the core content standards.

**ITALIAN V HONORS**

**5 CREDITS**

**12**

Italian V Honors emphasizes the overall use of Italian grammar as presented and mastered in Italian I through IV with an expansion of vocabulary and idiomatic expressions. Special emphasis is placed on the development of conversational skills. Culturally authentic literature and other written materials will be presented for analysis, comparisons and review.

**SPANISH I**

**5 CREDITS**

**9-12**

This introductory course makes use of the target language to develop thematic units based on everyday experience. Basic grammar and vocabulary are stressed. Conversation is encouraged. Opportunities are provided for students to hone their conversational skills through the interpersonal, interpretive and presentational modes in accordance with the core content standards. Through reading selections and classroom discussion, the student is familiarized with the culture and civilization of the Spanish-speaking world.

**SPANISH II**

**5 CREDITS**

**9-12**

The second year of Spanish continues to introduce the student to the basic fundamentals of the language; a foundation in vocabulary, an understanding of the grammar, and an appreciation of the culture and history of the Hispanic world. Reading materials, videos, compact discs and computer software programs will acquaint the student with the customs, culture and various societal issues that confront the Spanish speaking countries. In addition, students are familiarized with career options available to speakers of Spanish.

**SPANISH III**

**5 CREDITS**

**10-12**

Students in their third year of Spanish instruction are exposed to a combination of vocabulary building, advanced grammar principles, conversation and writing practice. Reading and listening comprehension exercises get special emphasis. An introduction to basic units focusing on culture, geography and history help prepare the student for further study. Career options for speakers of Spanish are discussed at length.

**SPANISH IV HONORS**

**5 CREDITS**

**11-12**

Students in their fourth year of Spanish concentrate on improvement of communication skills and building of a greater working vocabulary. Students develop appreciation for Hispanic culture and civilization through authentic literary texts and authentic print material. They will be expected to express themselves at a more sophisticated level through the interpersonal, interpretive and presentational modes in accordance with the core content standards.

**SPANISH V HONORS****5 CREDITS****12**

Spanish V Honors emphasizes the overall use of grammar as presented and mastered in Spanish I through IV with an expansion of vocabulary and idiomatic expressions. Special emphasis is placed on the development of conversational skills. Culturally authentic literature and other written materials will be presented for analysis, comparisons and review.

## WORLD STUDIES

Course Title	Grade Level	Credits	Course Level	Prerequisite
World History	9	5	General	None
			Enriched	
			Honors	Teacher recommendation
United States History I	10	5	General	World History
			Enriched	
AP United States History I	10	5	AP	World History Honors; teacher rec.
United States History II	11	5	General	US History I
			Enriched	
AP United States History II	11	5	AP	AP US History I
AP European History	10-12	5	AP	None
AP American Government & Politics	11-12	5	AP	None
AP Human Geography	11-12	5	AP	None
AP Psychology	11-12	5	AP	None
World Geography	9-12	5	General	None
20 <sup>th</sup> Century American Pop Cult.	11-12	5	General	None
American Gov't.	9-12	2.5	General	None
Legal Studies	10-12	2.5	General	None
International Relations	9-12 (WV) 11-12 (WH)	2.5	General	None
Psychology	11-12	2.5	General	None
Sociology	11-12	2.5	General	None
Middle Eastern Studies (WH)	11-12	2.5	General	None
Contemporary Issues in World History	9-12	2.5	General	None
Human Rights in World History	9-12	2.5	General	None

### WORLD HISTORY

**5 CREDITS**

**9**

The World History course focuses on developing students' abilities to think conceptually about world history from approximately the Renaissance to the present and apply historical thinking skills as they learn about the past. Five themes of equal importance — focusing on the environment, cultures, state-building, economic systems, and social structures — provide areas of historical inquiry for investigation throughout the course. The course encompasses the history of the five major geographical regions of the globe: Africa, the Americas, Asia, Europe, and Oceania, with special focus on historical developments and processes that cross multiple regions. Critical historical thinking and writing will be emphasized. In addition, Honors level students will be expected to complete numerous critical thinking papers each marking period.

**Students looking to place into the honors level must be approved to do so by the assistant principal. The assistant principal's approval is based upon teacher recommendations, test scores, and the quality of writing samples. Students should plan to continue in the Honors and AP track.**

### UNITED STATES HISTORY I

**5 CREDITS**

**10**

The U.S. History I course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content from pre-Columbian to Reconstruction focused around seven themes. The themes for this course are: peopling, politics and power, America in the world, environment and geography- physical and human, ideas, beliefs and culture. Students will be analyzing historical periods and will be writing on their analytical findings. Critical historical thinking and writing will be emphasized.

**AP UNITED STATES HISTORY I**

**5 CREDITS**

**10**

Using the basic course of study of American development, students are encouraged to look beyond historical facts and recognition of concepts. Emphasis is placed on developing analytical thinking skills, successful essay writing skills through the use of position papers and document based questions, and the opportunity to delve into philosophical, as well as practical application of knowledge through problem solving and role playing experiences. Through individual and collaborative research, students will analyze and interpret historical documents, and assess the validity of historical propositions in order to build an effective argument while also learning technological skills necessary for today's world. **Students looking to place into the advanced placement level must be approved to do so by the assistant principal. The assistant principal's approval is based upon teacher recommendations, test scores, and the quality of writing samples. Students should plan to continue in the Honors and AP track. It is expected that students will sit for the AP Exam after taking AP United States History II.**

**UNITED STATES HISTORY II**

**5 CREDITS**

**11**

The U.S. History II course focuses on the continued development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and an understanding of content from Reconstruction to the present focused around the same seven themes: peopling, politics and power, America in the world, environment and geography- physical and human, ideas, beliefs and culture. Critical historical thinking and writing will be emphasized.

**AP UNITED STATES HISTORY II**

**5 CREDITS**

**11**

Full recognition is given to the primary importance and mastery of basic academic material presented in AP History I. Upon that foundation, students are further challenged to refine their analytical thinking through opinion development, role-playing and problem solving. Knowledge of current events and application of material being covered to current developments allows opportunities to take theory and apply it to real situations. Analytical writing is emphasized through the use of argumentative essays and Document Based Questions that challenge the student's ability to assess primary and secondary documents. Research ability, individual initiative and self-motivation are important. **A pre-requisite is AP US History I. It is expected that students will sit for the AP Exam.**

**AP EUROPEAN HISTORY**

**5 CREDITS**

**10-12**

The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse, not only in the United States, but also in our ever changing globally connected world. In addition to providing a basic narrative of events and movements, the goals of AP European History are to develop (a) an understanding of some of the principal themes in modern European history, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing. Additionally, the course will cover topics devoted to study of intellectual and cultural, political and diplomatic, and the social and economic history of European nations. **Recommended for Enriched or Honors level students only. It is expected that students will sit for the AP Exam.**

### **AP AMERICAN GOVERNMENT & POLITICS**

**5 CREDITS**

**11-12**

This course is the study of American Government, its structure and process. Course goals include student understanding of the development, functions and direction of American government and politics. In addition, the goal of the course is to provide students with substantive content, thinking skills, and writing practice to support success on the Advanced Placement American Government Examination. Students are expected to take the Advanced Placement exam in May. **Recommended for Enriched or Honors level students only. It is expected that students will sit for the AP Exam.**

### **AP HUMAN GEOGRAPHY**

**5 CREDITS**

**11-12**

The purpose of the Advanced Placement course in Human Geography is to introduce the students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also learn about the methods and tools geographers' use in their science and practice. Mathematical formulas and qualitative data will be applied to geographical concepts. Students will be trained to consider the interrelationships of the world's political, environmental and cultural climates. The course explores the dynamics of human population growth and movement, patterns of culture, economic uses of the earth, political organization of space and human settlement patterns, particularly urbanization. **Recommended for Enriched or Honors level students only. It is expected that students will sit for the AP Exam.**

### **AP PSYCHOLOGY**

**5 CREDITS**

**11-12**

The AP Psychology course is a full year course and is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. **Recommended for Enriched or Honors level students only. It is expected that students will sit for the AP Exam.**



**WORLD GEOGRAPHY****5 CREDITS****9-12**

This is a full year course in which the major goal is to understand how interdependent humanity is in the modern world. After establishing a good foundation in the physical aspects of geography, students will learn about the cultures of many nations and appreciate how Americans fit into this global village.

**20<sup>th</sup> CENTURY AMERICAN POP CULTURE****5 CREDITS****11-12**

This full year elective course focuses on the interaction between American history and popular culture. Beginning with an examination of pop culture prior to 1900, students will create an understanding of what pop culture is and why it is an important factor in American society. A contrast of conservative and liberal eras in the United States since 1900 will serve as a basis for comparison to the pop culture of those same eras, evaluating whether popular culture is a reaction to or a reflection of that period. Students will examine various forms of pop culture including leisure time activities, art, language/slang, literature, communication, technology, transportation, medicine, music, television, movies, sports, and advertising. Finally, the students will look at the forces that blend and create changes in our culture and what this could mean to the future of the country and to better understand the interactions of Americans in general.

**AMERICAN GOVERNMENT (One Semester)****2.5 CREDITS****9-12**

This course provided an opportunity for students to become involved in the study of American government and to further embrace their civic responsibilities, as well as their constitutional rights and obligations. They will develop a basic understanding of how our national, state and local governments function in relation to each other and independently from one another. Our role in determining our representatives will be emphasized as recognizing the concept of global interdependence.

**LEGAL STUDIES (One Semester)****2.5 CREDITS****10-12**

This semester course focuses on various aspects of the law and our legal system. Units of study include an analysis of what is essential in creating law, the purpose of law and the relationship between law and values. An investigation of law-making institutions and the role of courts and lawyers in this process will ensue. An evaluation of the causes of criminal activity and an intense study of the criminal justice system with an emphasis on the tension between citizen responsibilities and civil rights will take place. The course will wind up with a critical look at our civil law and tort system. Students will participate in individual and group projects. Selected case studies and landmark Supreme Court decisions will be analyzed. Guest speakers, mock trials and field trips will round out the learning experience.

**INTERNATIONAL RELATIONS (One Semester)****2.5 CREDITS****9-12 WV 11-12 WH**

This semester course will focus upon the United States and its involvement in the world of international politics. Primarily, this course will explore various alternatives in dealing with aggressive nation/states who often threaten the sovereignty and security of other nations.

Content materials will revolve around the origins of government, international politics, United States foreign policy, international terrorism, and the role of the United Nations and other peacekeeping organizations.

**SOCIOLOGY (One Semester)**

**2.5 CREDITS**

**11-12**

This single semester elective course is designed to enhance understanding, appreciation of social relations, social organization and social institutions, as well as their dynamics. Through this course, students will gain insight into our social structure and their role in it. Much of the class is devoted to discussion, which places responsibility on the student's contribution toward the quality of the course. **This course is offered as a Dual Enrollment course for college credit.**

**PSYCHOLOGY (One Semester)**

**2.5 CREDITS**

**11-12**

Psychology is a single semester course developed to assist the student to better understand him/herself and to appreciate the genetic, biological and environmental forces that shape our behaviors and personality. This academic elective is taught on a sophisticated level with an emphasis on in-class demonstrations. The goal of the course is a progression of knowledge building on an introduction to the modern scientific paradigm with special emphasis on methodology, psychobiology and cognitive neuroscience, levels of consciousness, learning, motivation and emotions, theories of personality, the psychology of stress, and mental disorders. **This course is offered as a Dual Enrollment course for college credit.**

**MIDDLE EASTERN STUDIES (WH) (One Semester)**

**2.5 CREDITS**

**11-12**

This is a single semester course that will place emphasis on the contemporary developments of the Middle East. Students will be provided with ample background so as to appreciate the rapid changing character of this important geographical region. The various attempts at peaceful coexistence will be analyzed.

**CONTEMPORARY ISSUES IN WORLD HISTORY**

**2.5 CREDITS**

**9-12**

To be a more well-rounded and informed citizen, today's students need to be well versed in the issues that citizens of the world are facing today. This course will be a valuable addition to the course catalog because it will allow students to study and understand the current cultural, political, and economic global environment. Additionally, this course will allow students to connect and apply their study of history to the issues the world is facing today. This course will be internet and discussion based to allow students to further enhance their abilities to use reliable, accurate resources to debate and understand what role they may play in the global community.

**HUMAN RIGHTS IN WORLD HISTORY**

**2.5 CREDITS**

**9-12**

Students will be provided with a comprehensive understanding of the evolution of human rights in history, an understanding of today's international framework for promoting and protecting human rights, and the opportunity to potentially work to better their local community. This course will provide students with rich content knowledge steeped in human rights, as well as

opportunities to exercise skills in leadership that will benefit not only the students, but the school and the local community.