APPOQUINIMINK HIGH

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2012-2013

High School Scho



Get ready to Stand Out from the crowd applying to college

Universities like to see students go out of their way to challenge themselves. So take the most rigorous course load you feel you can successfully navigate, get involved with activities and organizations outside the classroom, and develop your strengths.

Earn college credits while you're still in high school:

Advanced Placement Courses

The broad selection (17 different options) includes English, Math, Science, Social Studies, World Language, Music, and Art

Dual-enrollment Courses

Partnerships with area universities (UD, Del Tech) mean we are able to offer English, Math and Science - see page 1 for more information.

Tech Prep Courses

Sequenced coursework coordinated with participating colleges in pathways like Drafting and Design.

Make sure you're college & career ready!

SAT Prep will be offered to ALL students this year as part of the Grade 11 Advisory The PSAT will be offered free to students in Grades 9-11 The SAT will be offered free to ALL Grade 11 students

The Appoquinimink School District does not discriminate on the basis of race, color, gender, religion, age, disability, marital status, national origin, or other legally protected categories in its educational programs, activities, employment, or student admissions policies or practices. Inquires regarding compliance with the above can be directed to Section 504 Contact Kittie Rehrig, Supervisor of Student Services, Appoquinimink School District, 313 South Fifth Street, Box 4010, Odessa, DE 19730-4010, telephone (302) 376-4111. Responsibilities: To coordinate the Appoquinimink School District's efforts to comply with the disability discrimination laws. Title IX Contact Matt Fallis, Director of Personnel, Appoquinimink School District, 313 South Fifth Street, Box 4010, Odessa, DE 19730-4010, telephone (302) 376-4275 Responsibilities: To coordinate the Appoquinimink School District's efforts to comply with and carry out the District's responsibilities under Title IX, including any investigation of any complaint alleging noncompliance with Title IX or alleging actions which would be prohibited by Title IX.

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Graduation Requirements

Successful course selection is no accident. Make sure your choices are consistent with your abilities and career plans. Graduation from high school and preparation for college, other post-secondary education or a career should be your primary consideration when selecting courses for the upcoming year. A minimum of 23 credits and successful completion of a senior project is required for graduation. To ensure that you are properly prepared, please review carefully the number of credits specified in each area before submitting your selections for this year.

CLASSES OF 2012-2014

SUBJECT	CREDITS
English	4
Social Studies	
Mathematics*	4
Science	3
Physical Education	1
Health	0.5
Career Pathway	3
Electives	3.5
Senior Project	PASS
Student Success Plan	COMPLETION
TOTAL CREDITS	23

CLASS OF 2015 AND BEYOND

SUBJECT	CREDITS
English	4
Social Studies	4
Mathematics*	4
Science	3
World Languages	2
Physical Education	
Health	0.5
Career Pathway	3
Electives	3.5
Senior Project	0.5
Student Success Plan	0.5
TOTAL CREDITS	26

* FINAL MATH CREDIT must be taken and earned during senior year. Students taking additional math courses must plan to take, and successfully earn, a math credit in their senior year no matter the number of total credits earned prior to that school year.

College Courses

We are proud to partner with local colleges and universities to give gifted students opportunities to accelerate their learning. Students who successfully complete these courses may earn both high school and college credit. Tuition/registration fees are the responsibility of the student/guardian. ASD does not profit from these courses and offers them expressly to provide access to our accelerated learners.

UNIVERSITY OF DELAWARE

Critical Reading & Writing AHS/MHS Course No: EN5110 1 Semester Credits: 3 college, 1 HS

Expository and argumentative composition through analysis of selected readings. This course is required for all UD Freshmen. (UD Course #E110)

Western Civilization: 1648 to Present

AHS/MHS

Course No.: SS5102 1 Semester Credits: 3 college, 1 HS

The principal political, social, economic and cultural developments in Western civilization since the middle of the 17th Century. (UD Course # H102)

DEL TECH

Note: Students must pass an entrance exam prior to enrolling in DTCC courses.

Composition

Course No.: EN5121 1 Semester

Credits: 3 college, 1 HS

AHS/MHS

A college-level course designed to improve writing skills through practice in writing paragraphs, essays, informationbased documents and reports. Additional resources are available for skill enhancement. Pre-requisites: Test score or ENG 051, ENG 125, NCS 051, NCS 052, ESL 100, RDG 051 or RDG 120. (DTCC Course #ENG121)

General Psychology AHS/MHS Course No.: SS5121 1 Semester

Credits: 3 college, 1 HS

A survey of general principles underlying human behavior and mental processes. Course includes a study of the nervous system, perception, learning, motivation, personality and psychological disorders. Methods of assessment and research principles are discussed. Prerequisites: Test score or ENG 051, ENG 121, ENG 125, NCS 051, NCS 052, ESL 100, or RDG 120. (DTCC Course #PSY 121)

Senior Project

Senior Projects are a requirement for graduation from high school in the Appoquinimink School District. After receiving approval of the topic, students must complete all components by the spring semester of their senior year.

Student Success Plans

Delaware has developed a tool called the Student Success Plan (SSP) to help teens identify and consider post-secondary career and educational goals and develop a plan to pursue those goals. Students in grades 9-12 must create and/or update their SSP annually in order to graduate. Students are provided access to the website, www.careercruising.com for this purpose. In order to receive full credit for this requirement, parents must review their student's plan each year and confirm their participation in the process. This may be done at home or during a visit to school.

Calculus AHS/MHS

Course No.: MA5281 1 Semester Credits: 4 college, 1 HS

Description: A study of functions, limits and continuity; differential calculus of algebraic and trigonometric functions with applications; and an introduction to the development of the definite integral. (DTCC Course # MAT281)

SAT PREPARATION

ALL Juniors will study, prepare and practice for the SAT test during their advisory period. They will learn how the test is scored, review content material and practice with common content themes while applying various test-taking strategies.

Career Pathways

The State of Delaware requires students to complete three credits in a career pathway in order to be eligible for a high school diploma. A list of the career pathways available in each high school appears on this page. Note: Classes are offered in a sequential progression. Be sure to check prerequisites when selecting your courses.

Appoquinimink High Pathways

ACADEMIC

Allied Health

Allied Health I, II; Anatomy & Physiology; Healthcare Practices; Practicum Program; Medical Technology

Humanities

3 additional social studies and/or English courses

Math & Science Technology

3 additional math, computer science or science courses

World Languages

3 addtl. courses in the same language (not English)

AGRISCIENCE

Animal Science - Animal Science I, II, III, IV*

Natural Resources & Environmental Sciences

Natural Resources & Environmental Sciences I, II, III

Plant & Horticultural Science

Plant & Horticultural Science I;

Greenhouse/Horticultural Science II, III, IV*

BUSINESS, FINANCE AND MARKETING EDUCATION

Accounting

Business/Finance/Marketing Essentials Core; Accounting II, III, IV*

Banking Services

Business/Finance/Marketing Essentials Core; Banking Services II, III, IV*

Marketing Management

Business/Finance/Marketing Essentials Core; Marketing Management II, III, IV*

FAMILY & CONSUMER SCIENCE

Early Childhood Education

Early Childhood Development I, II, III

Textiles and Clothing

Textiles & Clothing I, II, III, IV*

Textiles & Clothing Independent Study/Research*

Food Preparation and Production

Food Preparation & Production I, II, III, IV*

ARMY JROTC - JROTC I, II, III, IV*

TECHNOLOGY EDUCATION

Drafting & Design

Drafting & Design - CAD I, II, III

Communication Technology R&D IV*

Graphic Design & Production

Graphic Design & Production I, II, III

PERFORMING ARTS

Instrumental Music - 3 instrumental music courses **Theatre Arts** - Fundamentals of Acting I, II, III

Vocal Music - 3 vocal music courses

VISUAL ARTS

Ceramics & Sculpture

Foundations of Art; Ceramics & Sculpture I, II

Drawing & Painting

Foundations of Art; Drawing & Painting I, II

Photography

Foundations of Art; B/W Photography I, II

Middletown High Pathways

ACADEMIC

Allied Health

Allied Health I; Medical Terminology; Medical Technology; Sports Medicine; Practicum; Medical Technology; Anatomy & Physiology

Humanities

3 additional social studies and/or English courses

Math & Science Technology

3 additional math and/or science courses

World Languages

3 addtl. courses in the same language (not English)

AGRISCIENCE

Plant Science

Intro to Plant and Horticultural Science I; Horticultural Science II. III

Animal Science - Animal Science I, II, III, IV*

Natural Resources/Environmental Science

Natural Resources/Environ. Science I, II, III

BUSINESS, FINANCE AND MARKETING EDUCATION

Information Technology

Business Info. Technology (BIT) Core; BIT II, III, IV*; Business Co-op; AP Computer Science

Accounting

Business/Finance/Marketing Essentials Core; Accounting II, III, IV*

Banking Services

Business/Finance/Marketing Essentials Core; Banking Services II, III, IV*

Marketing Management

Business/Finance/Marketing Essentials Core; Marketing Management II, III, IV

FAMILY & CONSUMER SCIENCE

Early Childhood Education

Early Childhood Development I, II, III

Food Preparation and Production

Food Preparation & Production I, II, III, IV*

AIR FORCE JROTC

ROTC I, II, III, IV*; ROTC Leadership;

ROTC Drill Class

JOBS FOR DELAWARE GRADS

JDG 9, 10, 11, 12*

TECHNOLOGY EDUCATION

Graphic Design & Production

Graphic Design & Production I, II, III

Drafting & Design - CAD

Drafting and Design - CAD I, II, III; Communication Technology R&D IV*

Construction & Manufacturing

Construction & Manufacturing I, II, III

PERFORMING ARTS

Vocal Music

General Chorus; Advanced Chorus; Music Theory I; AP Music Theory*

Theatre Arts

Fundamentals of Acting I, II, III;

Stagecraft I, II

Instrumental Music

Symphonic Band; Guitar-Music Appreciation;

Percussion Band; Piano Keyboarding; Music Theory I; AP Music Theory*

VISUAL ARTS

Ceramics & Sculpture

Foundations of Art:

Ceramics & Sculpture I, II, III

Drawing & Painting

Foundations of Art;

Drawing & Painting I, II

Photography - Digital Photography I **AP Art** - AP Art History; AP Studio Art

* Starred selections represent the final course in a series and are recommended for highly engaged students as a capstone experience in the career pathway.

Course Levels

College Preparatory Courses (CP)

College Preparatory courses are designed to provide a rigorous curriculum aligned with state standards. These courses prepare a student for a variety of post-secondary experiences including higher education and/or the workforce

Honors Courses (H)

Instruction in honors courses differs from CP courses in terms of the depth and pace at which the content is covered. Honors courses are designed to challenge students and prepare them for admission to highly competitive colleges & universities. Students enrolled in these courses are expected to utilize independent learning and study skills.

Advanced Placement (AP)

AP courses are designed to challenge students who demonstrate a consistent record of outstanding achievement. Rich course material, vibrant classroom discussions and demanding assignments help teens develop the content mastery and critical thinking skills expected of college students.

The College Board audits all AP curriculums while developing and scoring examinations for each course. In addition to content, AP courses focus on preparation for the College Board AP Test. After successfully completing an AP test, students may earn advanced standing and/or college credit as determined by the institution for which the student is seeking admission.

Students enrolled in an AP course(s) may be expected to adhere to the following:

- Attend a conference with parent and guidance counselor
- Sign an AP agreement
- Attend two scheduled meetings in July and August
- Complete a summer assignment for each AP course
- Participate in the AP exam in May.

Tech Prep (TP)

Tech Prep is a course alignment process between participating colleges and a career program of study. Courses taught in high school are coordinated with college classes so that the same content and level of material is being taught at both places. Students who pass the series of courses agreed upon in the articulation agreement, with an 85% or better in each, are eligible to receive class credit at the articulated college. Students must sign up on the CATEMA site each time they take an articulated class in order for the classes to be tracked for credit

Dual Credit Enrollment Policy

Appoquinimink School District students may elect to take approved college level courses for both high school and college credit in accordance with the district policies established under Delaware Department of Education Regulation 506. In part, the policy states:

- a. High School students who have enough credits to be considered a high school senior shall receive credit towards high school graduation for enrollment in college level courses by enrolling and successfully completing a course provided through:
 - The University of Delaware
 - Wilmington University
 - Del Tech
 - Other accredited post-secondary institutions as approved by the Superintendent with a signed articulation agreement.
- b. In extenuating circumstances, high school students in the ASD who have accumulated enough credits to be considered juniors may petition the school principal to be permitted to receive dual credit for college courses. Applicable college level courses must be in the areas of:
 - English/Language Arts
 - Math
 - Science
 - Social Studies
 - World Language
 - Advanced Career & Technical Course aligned to the student's career pathway

GPA AND COURSE WEIGHTING

Grade Point Average (GPA) is calculated by dividing the total number of quality points by the number of credits attempted to date. Only final course and yearly cumulative GPAs appear on transcripts.

Students taking advanced level coursework through the honors, AP, Tech Prep and dual enrollment college programs earn additional quality points for each credit earned in their cumulative GPA upon successful completion of the course. This is known as a "weighted GPA." The additional weighting may serve to increase the student's cumulative GPA, and potentially her or his overall rank in the graduating class.

Courses carrying a designation of college dual enrollment, advanced placement (AP), honors (H) or Tech Prep (TP) will determine courses eligible for weighting. In order for a student to earn the weighted designation, they must earn a passing grade in the designated course. Weighting for these courses will be calculated with the following additional quality points per credit:

Course Level	Quality Points
Honors	0.5
Advanced Placement	1.0
Tech Prep	1.0
College Dual Enrollment	1.0

Honor Roll GPA is computed electronically at the end of each marking period. The official class rank is determined by the end of marking period 3 of the senior year.

Valedictorian and Salutatorian

Prior to graduation, a valedictorian and a salutatorian will be selected from the graduating class. The valedictorian will be the student ranking first in the graduating class and the salutatorian will be the student ranking second in the graduating class, as determined by their cumulative weighted GPA.

In the case of a tie for the valedictorian position, the students tied will share the honor and no salutatorian will be named. In the case of a tie for the salutatorian position both students will be named salutatorian.

Students wishing to be considered for class valedictorian or salutatorian must:

- a. Be enrolled in the School District no later than the first day of their junior year.
- b. Complete the same course requirements as all other members of the graduating class.
- c. For the purposes of these procedures, the cumulative weighted GPA is the weighted GPA earned by a student throughout his/her entire high school career. The weighted GPA is the point value assigned to the earned grade for each course identified by the district as a weighted course. The weighted GPA is based on a 4.0.
- d. To determine whether or not a tie exists, the weighted cumulative grade point average shall be calculated to one thousandth of a point (0.001).

RECOMMENDED COURSES

Applying to a 4-Year College

Most post-secondary institutions recommend that an applicant successfully complete the following courses:

- 4 years of English
- 4 years of Social Studies
- 4 years of Mathematics
- 3-4 years of Science (including two lab-based science courses)
- 2-4 years of a World Language
- A total of 18 core courses (defined as English, math, science, social studies and world languages)

Families are encouraged to speak with the school counselor to confirm specific requirements. College admissions officers look favorably upon applicants who maintain a full and challenging schedule as seniors.

Schedule Changes

After the beginning of the school year, requests for changes are only considered for the following reasons: 1) incorrect level placement, 2) opening on student schedule, or 3) course not requested by student. Dropping a course may not be considered after a class has met five (5) times during the term, regardless of student attendance during that term. The last day to make schedule changes is before the sixth class meeting.

Promotion Guidelines

Grade level promotion in high school is determined through the acquisition of credits. Students are scheduled into appropriate sequential courses based upon the courses they earned in their previous high school year(s). The chart below is used to determine promotion status and therefore grade placement.

To be considered in grade:

Grade	Minimum Credits	Must Include
10	5	1 English 1 Math 1 Social Studies 1 Science 1 Elective/CTE
11	11	2 English 2 Math 2 Social Studies 2 Science 3 Electives/CTEs
12	15	3 English 3 Math 3 Social Studies 2 Science 4 Electives/CTEs

To participate in commencement exercises, students must pass all credits and requirements necessary for graduation prior to the ceremony.

Typical Student Schedule

Appoquinimink School District High Schools schedule classes on a 4 X 4 block. This means students will typically take four courses each semester (18 weeks). Classes are normally 90-minutes long.

Advantages to block scheduling include: allowing more opportunity for teaching and learning, increasing time spent in the classroom, increasing student opportunities for taking higher level courses and decreasing the number of courses requiring a student's attention in any given semester.

SAMPLE STUDENT SCHEDULE

The schedule for a student enrolled in the Allied Heath Career Pathway might resemble this:

GRADE 9:

Semester I

Integrated Math

English 9

Physical and Earth Science

PE + Health 9

Semester II

Integrated Math

U.S. History 1960-1929

Spanish I

Foundations of Art

GRADE 10:

Semester I

Integrated Math II U.S. History 1930-Present

Spanish II

Allied Health I

Semester II

English 10 Honors

Driver's Ed + P.E

Spanish III

Biology/Chemistry Honors

GRADE 11:

Semester I

Integrated Math III

English 11 Honors

Spanish IV

Medical Terminology or Allied Health II

Semester II

Drawing & Painting I

Modern World History

Sports Medicine

Physics Honors

GRADE 12:

Semester I

Integrated Math IV

English 12

AP Chemistry

Early Childhood

Semester II

Calculus

Anatomy & Physiology

AP Chemistry

Psychology

This is only an example. Your schedule may look very different depending on course availability and your desire to take honors or AP courses or accelerate course sequences in a specific area.

ENGLISH COURSES

College-level English courses, offering credit in both HS and college, may be found on Page 1.

English 09

AHS/MHS CP Course No: EN1101 1 Semester H Course No: EN1501 1 Credit

Through a genre-based approach, ninth grade English students will begin their high school career by expanding on the reading skills and strategies learned previously. Critical reading skills will be reinforced as students tackle increasingly more complex text and materials independently. In addition to vocabulary expansion, the course will focus on the development of advanced writing skills, introducing more effective approaches to introductions, transitions, and supporting detail. Research skills and literary analysis approaches will also be refined.

English 10

AHS/MHS CP Course No: EN2101 1 Semester H Course No: EN2501 1 Credit

Using a varied selection of literature across genres, 10th grade English continues to build upon and add to student linguistic skills. Throughout the course, students will expand their vocabulary as well as strengthen their research and literary analysis skills. Writing will continue to be a strong focus, as students refine their skills in development, organization & style while crafting responses that represent an increased level of critical thought from those required in previous years.

Enalish 11

AHS/MHS CP Course No: EN3101 1 Semester H Course No: EN3501

1 Credit

The study of American Literature, its development and relationship to works from other geographical regions and time periods, will serve as the foundation for this course. Research and writing skills as well as new approaches to literary analysis will be introduced. The use of rhetoric will be a special focus for the course as students study and emulate the styles and approaches used in a variety of masterpieces from American luminaries such as Thomas Jefferson and Martin Luther King, Jr.

English 12

CP Course No: EN4101 H Course No: EN4111

AHS/MHS 1 Semester 1 Credit

This course is designed to expose students to a variety of works from a wide range of periods and perspectives. Through the examination of Classical, British and Contemporary Literature, as well as related media, students will explore multiple themes relating to culture, society and the individual. The ultimate goal of the course is to refine students' critical reading and writing skills in an effort to help them be as prepared as possible for their post-high school endeavors.

AP Language and Composition Course No: EN3500

AHS/MHS 1 Semester 1 Credit

An AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects as well as the way general conventions and the resources of language contribute to effectiveness in writing. It is a rigorous course and students are expected to take the AP exam.

AP Literature and Composition

Course No: EN4501

AHS/MHS 1 Semester 1 Credit

An AP English Literature and Composition course engages students in the careful reading and critical analysis of literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers.

As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. Emphasis is placed on analysis of literature and literary composition. This is a rigorous course and students are expected to take the AP exam.

ELL PRE

Course No: EN2013

AHS/MHS

1 Semester 1 Credit

In this course, taught to newcomers to the English language, students will learn basic vocabulary and survival language functions. Some American culture will be presented.

ELL I

AHS/MHS 1 Semester

1 Credit

This course emphasizes listening and speaking skills. Students learn language patterns and structures that will enable them to function in a variety of settings. Pronunciation is addressed as well as

spelling. Course satisfies one English credit requirement.

Course No: EN2012

Course No: EN2011

ELL II

AHS/MHS

1 Semester 1 Credit

Writing well constructed paragraphs is a major component of this course. Students will work on augmenting their vocabulary and understanding parts of speech. Course satisfies one English credit requirement.

Creative Writing

Course No: EN9601

AHS/MHS 1 Semester 1 Elec. Credit

This class will encourage students to cultivate the habits, attitudes and flexibility of a professional writer. Students will experiment with and revise writing routinely, read and interpret selected works by published authors, keep and write regularly in a journal, and participate in writer response groups. This elective course is offered to aid students in their creative expression and help them find their critical voice through the exploration of various writing techniques.

MATH COURSES

A college-level Calculus course, offering credit in both HS and college, may be found on Page 7.

Selected math courses may be taken at the College Preparatory (CP) or Honors (H) level. CP and honors classes differ in the depth of coverage and rigor. Students considering honors and AP classes are encouraged to read the level descriptions located in the front of this publication.

Integrated Math I Course No: MA1040

AHS/MHS Semester Credit

This is the first course in a sequence that includes strands of algebra, statistics, probability and geometry which model real world situations. This is a problem-based math course that provides the opportunity to study linear, exponential and quadratic functions in ways that focus on the transitions between concrete and abstract thinking. Students will practice making connections between tables, graphs and equations for these functions. They will study surface area and volume, distributions of data and probability. A TI-83 or higher graphing calculator is required.

Integrated Math II

CP Course No: MA2040 H Course No: MA2045 AHS/MHS
1 Semester
1 Credit

The second course in the series provides an opportunity to explore systems of equations, matrices, coordinate geometry, quadratic functions, logarithms, probability and some trigonometry. A TI-83 or higher graphing calculator is required.

Integrated Math III

CP Course No: MA3040 H Course No: MA3045 AHS/MHS
1 Semester
1 Credit

This is the third course in the sequence and provides an opportunity to study reasoning strategies, geometric proofs, linear programming, triangle similarity & congruence, polynomial, quadratic and rational expressions, circles, logarithmic and trigonometric functions. A TI-83 or higher graphing calculator is required. Prerequisite: Integrated Math II.

Integrated Math IV

AHS/MHS

CP Course No: MA4040 1 Semester
H Course No: MA4045 1 Credit

This is the fourth and final course in the series. Successful completion will provide the student with a level of knowledge that meets the standards of Pre-Calculus and prepares them for future enrollment in Calculus. Topics include: composition of functions, vectors & parametric equations for motion, De Moivre's Theorem, data modeling, permutations, the Principle of Mathematical Induction, and applications of problems in physics, business and other disciplines. A TI-83 or higher graphing calculator is required. Prerequisite: Integrated Math III.

Algebra II with Statistics

stics AHS/MHS

CP Course No: MA3030 H Course No: MA2039 1 Semester 1 Credit

This course is a continuance of the Algebra I, Geometry Algebra II sequence. Concepts covered include functions and exponents, systems of equations, matrices, quadratic and exponential equations, logarithmic equations, and rational and radical equations. A TI-83 or higher graphing calculator is required. Prerequisite: Geometry with Statistics.

Algebra II-A with Statistics AHS/MHS

Course No: MA3034

1 Semester 1 Credit

This course divides the traditional one semester Algebra II course into two semesters (Algebra IIA and Algebra IIB) to give students more time to process and apply the new content. Students will study linear equations, functions and exponents and matrices. A TI-83 or higher graphing calculator is required. Prerequisite: Geometry with Statistics.

Algebra II-B with Statistics AHS/MHS

Course No: MA3035

1 Semester

This is the second course in the Algebra IIA and Algebra IIB sequence. Students will review Algebra IIA concepts, and will study quadratic equations, including factoring, exponential and logarithmic equations, and rational and radical functions. Prerequisite: Algebra IIA.

Probability and Statistics

AHS/MHS
1 Semester

1 Credit

Course No: MA3033

This course is an overview of introductory probability and statistics. The probability section will focus on data analysis. The statistics section includes graphical representations of data, numerical descriptions of distributions, drawing inferences from data (including misuses of data), sampling and experimental design, and simulation. A TI-83+ or

higher graphing calculator is required.

Prerequisite: Algebra II with Statistics.

Precalculus

AHS/MHS

CP Course No: MA3032 H Course No: MA3031 1 Semester 1 Credit

Students will examine a variety of topics in advanced algebra and geometry including sequences and series, functions and graphs, exponential and logarithmic functions, the development and application of trigonometric functions, trigonometric identities, inverses and limits. A TI-83+ or higher graphing calculator is required. Prerequisite: Algebra II with Statistics.

Honors Calculus

AHS/MHS

H Course No: MA4032

1 Semester 1 Credit

Topics include basic elements of calculus including basic differential calculus of polynomials, rational, logarithmic and exponential functions, derivative graphing and some discussion of limits. A TI-83+ or higher graphing calculator is required. Prerequisite: Precalculus.

MATH COURSES

AP Statistics

AHS/MHS

Course No: MA4031

1 Semester 1 Credit

Students will be introduced to the major concepts and tools necessary for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes; exploring data, sampling and experimentation, anticipating patterns, and statistical inference. All students are expected to take the AP exam. This is a year long, alternate day, course. A TI-83+ or higher graphing calculator is required. Prerequisite: Algebra II with Statistics or Integrated Math III.

AP Calculus AB

AHS/MHS

Course No: MA4033

2 Semesters 2 Credits

This upper-level calculus course maintains the rigor of a college course and prepares students take the AP Calculus exam in May. It covers an introduction to limits, development of the derivative and application of the derivative to related rate problems, optimization, curve sketching and rectilinear motion problems. A TI-83+ or higher graphing calculator is required. Prerequisite: Precalculus Honors.

Computer Science I

AHS Course No: MA9100 1 Semester

1 Credit

This course introduces computer science and programming. The focus is on designing and implementing programs in an object-oriented language in addition to studying the hardware and software components of computers. Topics covered include basic data types and variables, control structures and repetition structures. This course is taught using the Alice environment as well as Visual Basic.

Computer Science II

Course No: MA9101

1 Semester 1 Credit

AHS

This course builds upon information learned in Computer Science I. Additional features and principles of objectoriented programming, including advanced looping structures, functions, introduction to objects and use of class libraries, are covered. The culmination of this course is a unit on video game design to teach introductory programming concepts of objects, functions and classes. This course is taught using C++. Prerequisite: Successful completion of Computer Science I.

Computer Science III

AHS

Course No: MA9102

1 Semester 1 Credit

This course builds upon information learned in Computer Science II. Students will be introduced to possible career choices and what they entail. They will use complex problem solving skills to continue their understanding of programming. Students will be studying the language of Java and HTML in an effort to focus on Object-oriented programming, structured program design and efficiency Java collections hierarchy, decision structures, looping structures, methods. classes, inheritance, 2-D arrays, GUI's, advanced file operations, CSS topics and software debugging methods. Prerequisite: Successful completion of Computer Science II.

AP Computer Science

Course No: MA9545

AHS 1 Semester 1 Credit

This course is similar to a first-year college course in computer science. The topics covered will be those set by the Advanced Placement Course Description for Computer Science. AP Computer Science will be taught using the programming language Java. Students enrolled in a College Board AP course are prepared for and should plan to take the AP Test in May.

DEL TECH

Note: Students must pass an entrance examination prior to enrolling.

Calculus

AHS/MHS

Course No.: MA5281 1 Semester Credits: 3 college, 1 HS

Description: A study of functions, limits and continuity; differential calculus of algebraic and trigonometric functions with applications; and an introduction to the development of the definite integral. (DTCC Course # MAT281)

SCIENCE COURSES

Physical and Earth Science AHS/MHS

Course No: SCI1055 1 Semester 1 Credit

This course is an introduction to chemistry, energy (physics) and earth science. There is an emphasis on lab work.

Physical and Earth Science Honors

AHS/MHS

Course No: SCI1060

1 Semester 1 Credit

This course studies physics and earth science topics. There is a heavy emphasis on math calculations and lab work. This is the first course of a two-year course sequence for students preparing to take AP science courses.

Biology I

AHS/MHS

Course No: SCI2055

1 Semester 1 Credit

Students are instructed in a modern scientific thematic approach which examine the challenges in human and environmental sustainability. Topics covered include: the Nature of Science. Cell Biology, Genetics, and Evolution. This course involves lab work and the use of technology. Prerequisite: Coordinated Science I or Physical and Earth Science.

Biology/Chemistry Honors AHS/MHS Course No: SCI2060

1 Semester 1 Credit

This course studies biology and chemistry topics. There is a heavy emphasis on math calculations and lab work. This is the second course of a two-year course sequence for students preparing to take AP science courses. Prerequisite: Coordinated Science I or Physical & Earth Science Honors.

Anatomy and Physiology Course No: SCI3603

AHS/MHS

1 Semester 1 Credit

This course is designed for college-bound students with an interest in medical careers. The course begins with a general biology review structured around the levels of organization of organisms starting with a study of the atom and builds up to cells and then tissues. The remainder of the course will focus on the study of the structure and function of the organs in the major body systems. Dissection is a requirement of this course. Prerequisite: Coordinated Science II or Biology I.

Anatomy and Physiology Honors Course No: SCI3623

AHS/MHS 1 Semester

1 Credit

This course is designed for collegebound students with an interest in medical careers. Students taking Honors Anatomy and Physiology will move directly into a study of major body systems after a brief look at general anatomy terminology and tissues. The course will focus on structure & function of major organs in each body systems. Dissection is a requirement of the course. Prerequisite: Coordinated Science II Honors or Biology/Chemistry Honors.

Biology II

AHS/MHS 1 Semester

Course No: SCI3621 1 Credit

This course is designed to develop student's understanding of life systems. Topics include a review of the basic chemistry of life, molecular and cellular biology, and a survey of biodiversity and ecology. Prerequisite: Coordinated Science II or Biology I.

Biology II Honors Course No: SCI3624

AHS/MHS 1 Semester 1 Credit

This course is designed to develop an understanding of life systems. A fastpaced curriculum includes the study of: molecular & cellular biology, biodiversity and ecology and discussions around research and current events on this theme. Prerequisite: Coordinated Science II Honors or Biology/Chemistry Honors.

Chemistry

Course No: SCI3606

AHS/MHS 1 Semester 1 Credit

This chemistry course is designed for college bound students interested in majoring in science and medical careers. Topics include: atomic structure, chemical reactions, the periodic table stoichiometry, and acids and bases. Lab work and mathematical calculations are emphasized. Prerequisite: Coordinated Science II or Biology I.

Chemistry Honors

AHS/MHS

Course No: SCI3607 1 Semester 1 Credit

This course is designed for honors juniors and seniors who seek more academic rigor than found in Chemistry I, but do not desire to take on the workload required by the AP Chemistry course. The course is a continuation of honors coordinated science II. Topics of study include: solutions and colligative properties, acids and bases, gas laws, thermo chemistry, equilibrium and an introduction to organic chemistry. Lab work and mathematical calculations are emphasized. Prerequisite: Coordinated Science II Honors or Biology/Chemistry Honors.

Environmental Science

AHS/MHS

Course No: SCI3604

1 Semester 1 Credit

This course is designed for students with an interest in the environment. The first half of the course is devoted to exploration of the environment, its habitats, and the organisms that live there. The second half of the course is devoted to man's influence on the environment. Topics addressed include ecosystems, environmental philosophy, pollution, and environmental policy. Lab work is emphasized. Prerequisite: Coordinated Science II or Biology I.

SCIENCE COURSES

Physics

AHS/MHS

Course No: SCI3605

1 Semester 1 Credit

This elective course addresses traditional physics topics through a conceptual approach. While math will be used in problem-solving, it is not strongly emphasized. Lab work is an integral part of the course. Prerequisite: Coordinated Science II or Biology I.

Physics Honors

AHS/MHS

H Course No: SCI3602

1 Semester 1 Credit

This elective course is designed for college-bound students with an interest in majoring in science or engineering. Problem-solving is highly emphasized as an integral part of the study of mechanics, energy, sound and light. Lab work and mathematical calculations are an integral part of the course. Prerequisite: Coordinated Science II or Biology I and concurrent enrollment in Precalculus or Calculus.

AP Biology

AHS/MHS Course No: SCI4601

2 Semesters 2 Credits

Advanced Placement Biology is a study of one year of college general biology. The pace and workload of this course is rigorous. Topics include molecular and cellular biology, genetics, evolution, and animal & plant systems. The focus of class discussion and extensive lab work is on preparation for the College Board AP test, which is administered in May. Students are expected to take the AP exam. Prerequisite: To take junior year students should have successfully completed Coordinated Science II Honors or Biology/Chemistry Honors.

AP Chemistry Course No: SCI4602

AHS/MHS 2 Semesters 2 Credits

Advanced Placement Chemistry is the equivalent of one year of college general chemistry. The pace and workload of this course is rigorous. Topics include atomic structure, chemical reactions, stoichiometry, gas laws, rates of reactions, chemical equilibrium, acids and bases, and electrochemistry. The focus of both class and lab work is on preparation for the College Board AP test which is administered in May. Prerequisite: To take junior year students should have successfully completed Coordinated Science II Honors or Biology/ Chemistry Honors.

AP Environmental Science

Course No: SCI4603

AHS/MHS 1 Semester 1 Credit

Advanced Placement Environmental Science is the equivalent of one semester of college environmental science. The pace & workload of this course is rigorous. The course is designed to help students understand the interrelationships of the natural world, and identify and analyze environmental problems both natural and human-made, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. The focus of both class and lab work is on preparation for the College Board AP test which is administered in May. Prerequisite: To take junior year students should have successfully completed Coordinated Science II Honors. To take senior year students must have successfully completed Coordinated Science II.

AP Physics B

Course No: SCI4605

AHS/MHS

2 Semesters 2 Credits

Advanced Placement Physics is the equivalent of one semester of college general physics. The pace and workload of this course is rigorous. This course includes topics in both classical and modern physics: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. The focus of both class and lab work is in preparation for the College Board AP exam, which is administered in May. Prerequisite: Previous or concurrent enrollment in Precalculus or Calculus.

Physical and Earth Science 1A

AHS/MHS

Course No: SCI8120

1 Semester 1 Credit

Students are introduced to chemistry, energy (physics) and earth science. Topics are studied in an integrated format. Labs support classroom studies. Placement is dependent on IEP goals and objectives.

Physical and Earth Science 1B

Course No: SCI8220

AHS/MHS

1 Semester 1 Credit

Students study chemistry, physics, earth science, genetics, biotechnology, and various human systems. Labs support classroom studies. Placement is dependent on IEP goals and objectives.

Biology IA

Course No: SCI8320

AHS/MHS 1 Semester

1 Credit

This is the third and final course in a three-year sequence. Using an integrated format, students study biology and related science content (genetics, ecology and cell chemistry). Lab work supports classroom studies. Placement is dependent on IEP goals and objectives.

SOCIAL STUDIES

College courses in Psychology and Western Civilization, offering both HS and college credit, may be found on Page 1.

College Preparatory and Honors classes differ in the depth and rigor of assignments. Please read the level descriptions located in the front of this publication.

U.S. History 1860-1929

AHS/MHS

CP Course No: SS1102 H Course No: SS1502

1 Semester 1 Credit

Students will investigate United States history from 19th century sectionalism through the 1929 stock market crash. This course integrates the principles of civics, economics, and geography with the study of history.

U.S. History 1930-Present

AHS/MHS

CP Course No: SS2102 H Course No: SS2502

1 Semester 1 Credit

Students will investigate United States history from the Great Depression to the present day. This course integrates the principles of civics, economics, and geography with the study of history. Prerequisite: Successful completion of U.S. History 1860-1929.

Modern World History

AHS/MHS

CP Course No: SS3102 H Course No: SS3502

1 Semester 1 Credit

Students will examine the roots of modern society by applying the principles of civics, economics, geography and history. Students will then explore global issues that challenge us today. Prerequisite: Successful completion of U.S. History 1930-Present.

Grade 12: Topics in Integrated Social Studies **AHS/MHS**

Course No: SS4000

1 Semester 1 Credit

Students will apply the principles of civics, economics, geography, and history to the study of contemporary issues. Prerequisite: Successful completion of Modern World History. This course fulfills the 12th grade social studies credit requirement. Placement is dependent on IEP goals and objectives.

African American History

Course No: SS40071

AHS/MHS 1 Semester 1 Credit

Students explore the African American struggle for freedom and equality. Topics include the study of African societies, slavery, the Civil War and current African American issues. Prerequisite: Modern World History. Course fulfills the 12th grade social studies credit requirement.

Economics

AHS/MHS

Course No: SS44023 1 Semester 1 Credit

Students investigate how the market system works, studying microeconomics, macroeconomics, and international trade. They apply economic principles to the management of personal finance. Prerequisite: Modern World History. Course fulfills 12th grade social studies credit requirement.

Psychology

AHS/MHS

Course No: SS4003 1 Semester 1 Credit

Students investigate scientific theories of human behavior and their application. They explore the anatomy of the brain and discover what psychologists have learned about why people behave the way they do. Prerequisite: Modern World History. This course fulfills the 12th grade social studies credit requirement.

Sociology

AHS/MHS

Course No: SS4403

1 Semester 1 Credit

Students explore the social origins of human behavior, gaining an understanding of culture and the structure of societies. They develop a sociological perspective and learn how to conduct social science research using state of the art technology; interpret data, and present conclusions.

AP Microeconomics

AHS/MHS

Course No: SS4502

1 Semester 1 Credit

Students investigate components of a market economy. Prerequisite: U.S. History 1930-Present. This course is intended for grades 11-12 and fulfills the fourth social studies credit. Grade 11 students must be dually enrolled in Modern World History (CP/H) or AP World History.

AP Psychology

Course No: SS4004

AHS/MHS

1 Semester 1 Credit

Students investigate the scientific theories of human behavior and their application. They explore the anatomy of the brain discovering why people behave the way they do. Prerequisite: U.S. History 1930-Present. This course is intended for grades 11 or 12. It fulfills the fourth social studies credit. Grade 11 students must be dually enrolled in Modern World History (CP/H) or AP World History.

AP U.S. History

Course No: SS4503

AHS/MHS 1 Semester 1 Credit

Students will examine various topics in United States history from the 15th century to today. Prerequisite: U.S. History 1930-Present. This course is intended for grades 11 or 12. It fulfills the fourth social studies credit. Grade 11 students must be dually enrolled in Modern World History (CP/H) or AP World History.

AP U.S. Politics & Govt.

Course No: SS4504

AHS/MHS 1 Semester 1 Credit

Students investigate various aspects of U.S. government. Topics include U.S. culture and voting, American democratic principles and values, the institutions of government, and the creation & effects of public policy. Prerequisite: U.S. History 1930-Present. This course is intended for grades 11 or 12. It fulfills the fourth social studies credit. Grade 11 students must be dually enrolled in Modern World History (CP/H) or AP World History.

AP World History

AHS/MHS

Course No: SS4505

1 Semester 1 Credit

Students will examine the evolution of global processes from 8000 B.C.E. to the present. Topics include human interaction with the environment, the development of cultures, the expansion of empires, the growth of economic systems, and the transformation of social structures. Prerequisite: U.S. History 1930-Present. This course is intended for grades 11 or 12. It fulfills the third or fourth social studies credit requirement.

WORLD LANGUAGES

All world language courses noted as level 3 or above receive honors weighting when calculating the weighted GPA. Note: Although American Sign Language (ASL) is accepted by the State of Delaware, it may not be accepted by all colleges and universities. To confirm that your desired college *does* recognize ASL as a world language, go to: http://web.mac.com/swilcox/UNM/univlist.html

American Sign Language I AHS/MHS Course No: FL5814 1 Semester

1 Credit

Students gain a basic knowledge of expressive and receptive American Sign Language (ASL) vocabulary through performance based activities. Basic ASL grammar structure will be studied. They will also be introduced to the American Deaf Culture.

American Sign Language II AHS/MHS Course No: FL5815 1 Semester 1 Credit

Students further their understanding of ASL with advanced grammatical study and conversation. A more in-depth study of American Deaf Culture will be pursued. Prerequisite: ASL I

Chinese I (Mandarin) Course No: FL5501 1 Semester 1 Credit

This course introduces the fundamentals of Mandarin. Students focus on the Chinese Pinyin Romanization system, Chinese characters and calligraphic techniques. Students are also exposed to Chinese culture.

Chinese II (Mandarin) Course No: FL5502 AHS/MHS 1 Semester 1 Credit

A continuation of the four pillars of language learning: listening, speaking, reading and writing. Class instruction emphasizes situational activities and performances as well as further study of culture and history. Prerequisite: Chinese I.

Chinese III (Mandarin) AHS/MHS

H Course No: FL5503 1 Semester

This course provides students with new vocabulary items and phrases. Students will further their understanding of grammar, as well as their ability to read expositive and narrative articles. Basic writing skills will be introduced. Prerequisite Chinese II.

Chinese IV (Mandarin) H Course No: FL5504 1 Semester 1 Credit

Students will further their understanding of Chinese with advanced grammatical study, reading and conversation designed to help them become familiar with the culture of China. Prerequisite: Chinese III.

French I Course No: FL5301 AHS/MHS 1 Semester 1 Credit

Students gain a basic knowledge of spoken & written French vocabulary through practice in listening, speaking, reading and writing. Students will be introduced to the cultures of France & francophone areas of the world.

French II AHS/MHS Course No: FL5302 1 Semester 1 Credit

This course is designed to further the understanding & production of the French language through advanced grammar study, reading & conversation, & to familiarize the student with more of the culture of French speaking countries. Prerequisite: French I

French III AHS/MHS H Course No: FL5303 1 Semester 1 Credit

Students taking this course are expected to speak French and use their acquired knowledge in reading short stories, literary, historical and cultural articles, writing essays & compositions and oral presentations. Prerequisite: French II.

French IV

H Course No: FL5304 1 Semester

AHS/MHS

This course is designed to practice the skills gained in earlier study as well as further the understanding of French speaking countries and their culture through intensive literature, culture and historical study. Prerequisite: French III.

French V AHS/MHS

H Course No: FL5305 1 Semester 1 Credit

This course stresses oral and listening skills, as well as formal and informal written composition. Students are expected to speak in French and the course is taught entirely in French. Recommended for students desiring advanced practice prior to enrollment in AP French, or as a culminating course in the French language. Prerequisite: French IV.

German III AHS/MHS

H Course No: FL5203 1 Semester 1 Credit

Students will review basic grammar, vocabulary & conversation. Students will read short stories and poems and hold discussions of how they relate to German culture. Prerequisite: German II.

German IV AHS/MHS

H Course No: FL5204 1 Semester 1 Credit

This course reviews more advanced vocabulary and conversation skills. Emphasis is placed on perfecting the four skills of reading, writing, listening and speaking. A more sophisticated study of German culture is presented. Prerequisite: German III.

German V MHS H Course No: FL5205 1 Semester

1 Credit

Students will participate in advanced conversation and the advanced study of literature & grammar. Students are expected to speak in German and the course is taught entirely in German. Prerequisite: German IV.

Italian I MHS
Course No: FL5701 1 Semester
1 Credit

This course is designed to give students the basic knowledge of spoken & written Italian vocabulary through practice in listening, speaking, reading and writing. Students will be introduced to the culture.

Italian II MHS
Course No: FL5702 1 Semester
1 Credit

Students will further their understanding of Italian with intermediate grammatical study, reading and conversation designed to help them become familiar with the culture of Italy. Prerequisite: Italian I.

Italian III MHS
H Course No: FL5703 1 Semester
1 Credit

Students will further their understanding of Italian with advanced grammatical study, reading and conversation designed to help them become familiar with the culture of Italy. Prerequisite: Italian II.

Italian IV MHS
H Course No: FL5704 1 Semester
1 Credit

Italian III stresses advanced grammar, reading, writing & conversation with the use of technology, historical and current literature and cultural study. Students speak in Italian and the course is taught entirely in Italian. Prerequisite: Italian III.

Japanese I AHS/MHS
Course No: FL5401 1 Semester
1 Credit

An introduction to Japanese through the use of hiragana, katakana & basic concepts and uses of kanji. Students learn to speak, read and write about topics such as school, friends and family in the target language. They are also introduced to the culture and history of Japan.

Japanese II AHS/MHS
Course No: FL5402 1 Semester
1 Credit

Knowledge of Japanese is increased through conversation, grammatical study & reading. Students build on writing skills and continue to learn about the history and culture of Japan. Prerequisite: Japanese I.

Japanese III AHS/MHS
H Course No: FL5403 1 Semester
1 Credit

More sophisticated conversation and advanced grammar are studied. Students speak Japanese and use their acquired knowledge to read short stories and hold discussions related to Japanese culture. Essay writing and compositions will be introduced. Prerequisite: Japanese II.

Japanese IV AHS/MHS
H Course No: FL5404 1 Semester
1 Credit

Emphasis is placed on refining reading, writing, listening & speaking. Advanced readings are introduced & Japanese culture will be studied more extensively. Prerequisite: Japanese III.

Japanese V AHS/MHS
H Course No: FL5405 1 Semester
1 Credit

This course stresses oral and listening skills, as well as various styles of formal & informal written composition. Students are expected to speak in Japanese and the course is taught entirely in Japanese. Prerequisite: Japanese IV.

Spanish I AHS/MHS
Course No: FL5101 1 Semester
1 Credit

This course is designed to give students a basic knowledge of spoken and written vocabulary through practice in listening, speaking, reading and writing. Students will be introduced to the culture of Spanish speaking countries.

Spanish II AHS/MHS
Course No: FL5102 1 Semester
1 Credit

Students will further their understanding of Spanish with advanced grammatical study, reading and conversation designed to help them become familiar with the cultures of Spanish-speaking nations. Prerequisite: Spanish I.

Spanish III

H Course No: FL5103 1 Semester 1 Credit

AHS/MHS

Students are expected to speak Spanish and use their acquired knowledge to:
1) read short stories and literary, historical & cultural articles; 2) write essays and compositions; 3) deliver oral presentations. Prerequisite: Spanish II.

Spanish IV AHS/MHS
H Course No: FL5104 1 Semester
1 Credit

Students practice skills gained in earlier study and further their understanding of Spanish speaking countries and cultures through intensive literature, culture, and historical study. Prerequisite: Spanish III.

Spanish V AHS/MHS
H Course No: FL5105 1 Semester
1 Credit

Oral and listening skills, as well as formal and informal written composition are stressed. Students speak in Spanish and the course is taught entirely in Spanish. Spanish V is recommended for students desiring advanced practice prior to enrollment in AP Spanish, or as a culminating course in the Spanish language. Prerequisite: Spanish IV.

AP Spanish AHS/MHS

H Course No: FL5110 1 Semester 1 Credit

The purpose of this course is to prepare students to take the College Board Advanced Placement Spanish Language Exam. The emphasis is on analysis of literature and advanced conversation and composition. Prerequisite: Spanish IV. Note: Students should seek instructor input prior to enrolling.

Linguistics and
Human Language MHS
Course No: FL5601 1 Semester
1 Credit

Students five subsystems in every human language: phonology, phonetics, morphology, syntax and semantics. Exercises and readings are used to fully understand each subsystem. Prerequisite: Successful completion of at least two years of a world language.

AGRISCIENCE COURSES

Animal Science I

AHS/MHS

Course No: AG9119

1 Semester 1 Credit

Animal Science classes teach students about the science of animals, both large and small. Units of study include anatomy, physiology, breeds and species, reproduction, digestion, nutrition, health management and disease control.

Animal Science II

AHS/MHS

Course No: AG9120

1 Semester 1 Credit

Students will develop basic skills necessary to pursue a career in the animal science industry as a producer, technician or professional. Coursework explores anatomy & physiology, animal behavior, etc. Prerequisite: Animal Science I.

Animal Science III

AHS/MHS

Course No: AG9127

1 Semester 1 Credit

Students continue to study animals and related careers, continuing to build knowledge of anatomy and physiology, care, behavior, breeding, body systems, genetics, training, and management of large and small animals. Coursework increases knowledge of reproduction and breeding, herd management & facilities, design biotechnology, genetics, evaluation techniques, and alternative animal agriculture such as aquaculture. Prerequisite: Animal Science I & II.

Animal Science IV/Vet Tech AHS/MHS Course No: AG9114 1 Semester

Course No: AG9114

I Semester 1 Credit

This course is for students interested in continuing their study of animals and related health careers. Students will study topics such as anatomy and physiology, career information, office procedures, medical records, nutrition, animal care, medical terminology, instrument care & identification, animal handling techniques, vital signs, lab procedures, anatomy and pharmacology. Prerequisite: Animal Science III.

Plant & Horticultural I

Course No: AG9121

AHS/MHS 1 Semester 1 Credit

This class gives students an understanding of the parts of the plant from the cell up, as well as plant propagation, plant growth requirements and integrated pest management. Students will spend time working in the greenhouse to propagate and grow a spring plant crop.

Horticultural Science II Course No: AG9122

AHS/MHS

1 Semester 1 Credit

Students study how greenhouse plant cropping schedules are used to produce a commercially marketable crop. They explore topics such as plant growth and anatomy in addition to plant disorders, biotechnology and greenhouse structures. Prerequisite: Plant & Horticultural Science I.

Horticultural Science III

AHS/MHS

Course No: AG9123 1 Sem

1 Semester 1 Credit

The final course in the Plant and Horticulture pathway. Students focus on the use of plants in landscaping as well as homes and offices. We will study design, plant identification, human relations, plant disorders and care of plants. Prerequisite: Horticultural II.

Horticultural Science IV Course No: AG9131

AHS
1 Semester
1 Credit

This course applies research-based study that utilizes skills gained in the three previous levels of instruction. Students complete a comprehensive, course-long research project to further their knowledge and experience within plant science or the horticultural industry. They are expected to explore various careers within the horticultural industry and complete a minimal amount of hours of work-based experience (volunteer or paid). Students will be expected to compete in a career development event through the National FFA organization at the state level in a topic related to their

completed agriscience pathway.

Natural Resources/ Environmental Science I

Course No: AG9124

AHS/MHS

: AG9124 1 Semester 1 Credit

Students will be introduced to natural resource management including a look into the management of soils, water, air and forests. Students will also discuss ecology, zoology and the management of local and regional wildlife species. This course includes many hands-on activities providing real-world experiences.

Natural Resources/ Environmental Science II

AHS/MHS

Course No: AG9125

1 Semester 1 Credit

Students will continue their course of study from NRES I. Topics from the first level will be expanded to include the management and impact to people and the environment. Other topics include energy, alternative energy and sustainable agriculture. Prerequisite: NRES I.

Natural Resources/ Environmental Science III

AHS/MHS 1 Semester

1 Credit

Course No: AG9126

Students will take knowledge gained from the first and second level courses and apply it Topics of study include advanced concepts of environmental laws, sustainability and populations effects, land use planning, solid waste management and natural resource communications. Prerequisite: NRES II.

Agriscience Summer Work Experience

AHS/MHS

Course No: AG9700 100 Summer Hours 1/3 Credit

Agriscience pathway students in grades 9-11 who will be competing in Career Development Events, showing animals at the State Fair, building displays, preparing Agriscience Fair projects or working in an ag-related job may sign up for this experience. Students are visited by an agriscience teacher on a regular basis to review progress, meet with employers, and make recommendations. A written summary by the student and evaluations by the supervising teacher, employer, and parents will be included in the completed record book.

ALLIED HEALTH PATHWAY Title Credit Year Limit Allied **HPF** 10, 11, 12 30/section 7012 Health HPE Medical 10, 11, 12 30 7013 Terminology HPE Volunteer 2-Jan 10, 11, 12 Must be accepted 7014 at Christiana Care Hospital in March HPE Sports 11, 12 Medicine 7015 HPE Med. Tech. 2 12 20 Practicum 7016

Allied Health I AHS/MHS Course No: HPE7012 1 Semester 1 Credit

This course is for sophomores or above and serves as a prerequisite for all other courses within the Allied Health career pathway. No students shall be admitted to any other courses without being in the pathway for graduation, or without special permission and/or circumstances. Intensive study includes the following units: Health Care Careers, Health Care Systems, Safety & Infection Control Practices, First Aid & CPR, Vital Signs, Legal & Ethical Responsibilities, and Employability Skills. Students in this course will be certified in First Aid and CPR. Prerequisite: Health and Physical Education.

Allied Health II AHS Course No: HPE7011 1 Semester 1 Credit

This course is for sophomores or above and continues to investigate the health care delivery system with a focus on the human body as it relates to medicine. It is suggested that this course be taken as a junior, concurrently with Anatomy & Physiology as a third science. Areas of study include: review of Anatomy & Physiology, Human Growth and Development, Vital Signs, Pharmacology, Legal & Ethical Responsibilities, and Employability Skills. Prerequisite: Allied Health I.

Medical Terminology Course No: HPE7013 1 Semester 1 Credit

This course is for sophomores and above and focuses on an intensive technical study of the human body as it relates to medicine. It is suggested that this course be taken as a junior, concurrently with Anatomy and Physiology as a third science. Areas of study include: review of anatomy and physiology, medical word elements, pathology, diagnostics, signs and symptoms, terminology, therapeutic procedures & pharmacology. Upon successful completion of the course (85% or better) of a comprehensive final examination, students will receive three college credits from Delaware Technical Community College. Prerequisite: Allied Health.

Sports Medicine MHS Course No: HPE7015 1 Semester 1 Credit

Students are introduced to the theory of Sports Medicine including major dynamic trends in the field of athletic training. The following topics are studied: Professional Development and Responsibilities, Risk Management, Pathology of Sports Injury, Management Skills, and General Medical Conditions. Students are responsible for completing 60 hours of volunteer service to high school athletes under the supervision of the certified Athletic Trainer. This class is limited to 20 students per semester. Prerequisite: Allied Health.

Health Care Practices Course No: HPE7019 1 Semester 1 Credit

This course is for juniors and above and focuses on the technicalities of medical and dental practices in order to increase student competency in the health field. Students gain fundamental knowledge for a variety of entry level positions and beyond. Study includes: Review of Medical Terminology, Management Skills, Therapeutic Procedures, Medical and Dental Diagnostics, Medical Assistant Procedures, Dental Assistant Procedures. Prerequisites: Allied Health II.

Allied Health Practicum

Course No: HPE7014

AHS/MHS
1 Semester
1 Credit

This course is for sophomores and above who apply in January, and meet requirements in March. The program takes place at Christiana Care Hospital and is only offered during the summer. After successful acceptance into the program in March, and completion of the orientation hours, students spend 90-120 hours in intensive instruction volunteering, shadowing, and being mentored by, a full-time employee of Christiana Care Health Care System. The course meets twice a week for four hours per day, and runs a minimum of six weeks. Students can be placed in many areas of the Christiana Care Healthcare System at Christiana Hospital or affiliates, according to the interests of the student intern.

Medical Technology Course No: HPE7016

AHS/MHS
2 Semesters
2 Credits

Open to seniors only. This course places pathway students in local health care settings during a class period of the school day for a full year. Consideration for acceptance into the course includes: grades, attendance, behavior record and future goals of working in the health care field. The students will be responsible for completing 60 hours of volunteer service to the community health care provider. The course is worth two credits toward graduation. Current areas of affiliation include: Physician's Office, Internal Medicine, Physical Therapy, School Nurse's Office, Chiropractics, Radiology, Pediatrician's Office, Sports Medicine, Ophthalmology, Dental Office, Pharmacology, and Veterinary Medicine. Prerequisites: Interview and acceptance by the Allied Health teaching committee, Successful completion of Allied Health I.

BUSINESS, FINANCE & MARKETING EDUCATION

Business, Finance & Marketing Essentials (CORE) **AHS/MHS**

Course No: BFMT9510

1 Semester 1 Credit

This is the introductory course required for the Finance, Management and Administration, and Marketing Pathways. Topics include Business Law, Customer Relations, Economics, Financial Analysis, Human Resource Management, Marketing, Operations & Strategic Management, along with integration of Career Development, Communication Skills and Information Management.

Business Information Technology (CORE) **MHS**

Course No: BFMT9578 1 Semester 1 Credit

The Core course provides an introduction to web and object-oriented programming to prepare students for further study in IT/programming/computer programming while developing an understanding of the impact of IT on business. The course uses guided practice and tutorials followed by critical thinking exercises, projects and case studies. Students identify e-commerce entrepreneurship opportunities, technology requirements for an e-commerce business, and the steps for starting an e-commerce business and business plan.

Accounting II

AHS/MHS

Course No: BFMT9538

1 Semester 1 Credit

This course examines the fundamentals of accounting. Students will be introduced to the principles, theories and procedures necessary to complete the accounting cycle.

Accounting III

AHS/MHS

Course No: BFMT9582

1 Semester

This course expands upon the principles, theories and procedures introduced in Accounting II. Advanced applications and decision making based on financial reports is included in the course.

Accounting IV

Course No: BFMT9583

AHS/MHS 1 Semester 1 Credit

In this course, students apply their knowledge of the principles of accounting by learning to use accounting software for decision making and the creation of financial reports.

Banking Services II

AHS/MHS

Course No: BFMT9590

1 Semester 1 Credit

This course provides an introduction to the fundamental principles of banking applications. Students study the theories and procedures of financial systems.

Banking Services III Course No: BFMT9591

AHS/MHS

1 Semester 1 Credit

This course expands on the principles, functions, and procedures introduced in Banking Services II. Students acquire a greater understanding of the financial market and system, both nationally and globally.

Banking Services IV

AHS/MHS

Course No: BFMT9592

1 Semester 1 Credit

Students work in the high school bank as tellers and customer service representatives where responsibilities include: handling checking and savings transactions, settling the cash drawer, assisting clients by identifying their needs, recommending products to fulfill those needs, and helping complete new account documentation. They will assist in the operation of the Bank At School program in an elementary school where they will open savings accounts and collect deposits. Students are responsible for knowledge of bank products and services and must adhere to all Student Intern Guidelines. They must exhibit a high level of customer service and respect client privacy at all times. Prerequisites: Juniors and Seniors who have completed a Core Business class and Banking Services II.

Business Information Technology II

Course No: BFMT9579

MHS

1 Semester 1 Credit

Students learn the fundamental concepts of programming so that this knowledge can be applied to other programming languages. They will be challenged to solve programming problems to develop problem solving skills. The process of defining a problem, breaking it down into a series of smaller problems, and finally writing a computer program to solve it exercises a student's logical abilities. These skills will benefit our future business professionals as well as further prepare them for careers in IT. Prerequisite: Business Information Technology Core.

Business Information Technology III

MHS

Course No: BFMT9580

1 Semester 1 Credit

This course will familiarize students with web authoring tools including Dreamweaver. They learn to use image software to enhance and optimize images to be put on websites and they will learn to use flash animation software. This course is project based. Students will become more technically proficient in web application programming in the context of the design and development process emphasizing these skill areas: Project Management, Design, Research and Communications, and Professional Web Authoring. Students will complete an entrepreneurship exploration activity.

Business Information Technology IV

MHS

Course No: BFMT9581

1 Semester 1 Credit

Students enhance their computer programming skills using Java and focus on structured program design, classes, usage of data structures, decision structures, Boolean logic, looping structures and string manipulation.

BUSINESS, FINANCE & MARKETING EDUCATION

Marketing Management II Course No: BFMT9558

AHS/MHS
1 Semester
1 Credit

This course provides a general introduction to marketing. Students design and create advertisements, promotional campaigns and sales presentations. They expand their communication skills by giving oral presentations and will research business functions including: operations, management, sales, interviewing and hiring processes using a variety of resources and technology.

Marketing Management III AHS/MHS

Course No: BFMT9559 1 Semester
1 Credit

This advanced-level course is designed to give students a deeper understanding of the role that management plays in achieving the goals of any organization. Students will use marketing concepts, functions, theories, and computerized tools to analyze the ways in which economic, consumer and environmental variables affect the marketing process. They will concentrate on achieving mid-level skills in the areas of business law, customer relations, human resources management, and financial analysis. Moreover, the course provides further concentration in marketing as it relates to selling, pricing, promotion and product. Integrated throughout the course are individual and group DECA activities.

Marketing Management IV AHS/MHS Course No: BFM9560 1 Semester 1 Credit

As a capstone marketing course, students will apply marketing skills learned in previous level courses as identified individually for each high school. Course descriptions for each school appear in the next column. Prerequisites: Marketing Management II and III.

AHS MARKETING MANAGEMENT IV

The course will introduce the fundamentals of business management, including planning, raising capital, using business information, managing employees, and marketing products and services. The course is oriented toward principles needed to operate a small business and is designed for those who may eventually have their own businesses or desire to improve their skills for entry level management. The course will offer real life experience to students through the use of the school store. Students will be required to manage the school store, set store hours, negotiate contracts with vendors, interview employees and manage the cash flow of the store.

MHS MARKETING MANAGEMENT IV

Students will use business and marketing concepts, functions & theories with computerized tools. In their school campus environment and the school store students will focus on the promotion and marketing aspects of business utilizing sports and entertainment marketing curriculum. Students will integrate Adobe Master Suite CS4 software programs with Microsoft Office Products (primarily Microsoft Publisher and PowerPoint). Students will concentrate specifically on achieving entry-level job skills in the areas of customer relations, human resources management, and information management. Integrated throughout the course are participation in Virtual Business- Personal Finance, individual and group DECA and BPA activities. Prereguisite: Students must have completed one of the following pathways to enroll in this course: Marketing Management, Business Info. Technology, Accounting, Banking, or Graphic /Performing/Visual Arts.

Business Finance or Marketing Co-op

Course No: BFMT9702

AHS/MHS
1 Semester
1 Credit

Cooperative education provides a capstone experience to the career pathway. Students must complete an application, interview and be approved by the Cooperative Ed. Coordinator to enroll in the course. Employment in a job directly related to the completed career pathway is also required. Students must adhere to all class, district, state, and federal guidelines. Students will be paid in accordance with all state and federal laws pertaining to employment. Students will participate in the Employer/ Employee Appreciation Banquet. In addition, they are encouraged to enhance their experience by participating in the DECA program of co-curricular activities. Prerequisite: Must be a senior and obtain approval from Cooperative Education Coordinator.

AP Computer Science

Course No: BFMT9545

MHS
1 Semester
1 Credit

This course is similar to a first-year college course in computer science. The topics covered will be those set by the Advanced Placement Course Description for Computer Science. AP Computer Science will be taught using the programming language Java. Students enrolled in a College Board AP course are prepared for and should plan to take the AP Test in May.

FAMILY & CONSUMER SCIENCES

Food Prep & Production I AHS/MHS Course No: FCS9100 1 Semester

Course No: FCS9100 1 Semester

Students study nutrition, equipment and terminology while learning basic skills needed to prepare healthy foods and perform entry-level tasks in the kitchen. They prepare nutritious foods while demonstrating teamwork, customer service, honesty, dependability & communications skills. Food labs incorporate academics that demonstrate the relevance of reading, writing, math and science. Students are encouraged to participate in the student leadership organization, FCCLA. A uniform, including safety-approved footwear, is required for cooking labs.

Food Prep & Production II AHS/MHS Course No: FCS9101 1 Semester

1 Credit

Students practice the Hazard Analysis Critical Control Point Program used to ensure safety and sanitation in the food service industry. Hospitality industry standards will be emphasized in the proper use of small and large utensils, appliances and equipment during food preparation. Reading, planning, designing and preparing meals and menus will be a focus. Investigation of careers and qualifications will be explored. Participation in FCCLA is highly encouraged. A uniform, including safety-approved footwear, is required Prerequisite: Food Preparation and Production I.

Food Prep & Production III AHS/MHS Course No: FCS9102 1 Semester 1 Credit

Building on previously learned skills, students develop a solid foundation of proven culinary theory through which they can build a repertoire of professional skills. Basic industry techniques and safety procedures will be interwoven in instruction. Students will practice skills for successful employment. Uniforms are required, including safety-approved footwear. Participation in the student leadership organization, FCCLA, is highly encouraged. Prerequisite: Food Preparation and Production I and II.

Food Prep & Production IV AHS/MHS Course No: FCS9103 1 Semester 1 Credit

This is an in-depth, hands-on experience in the food service and hospitality industry. Our focus is restaurant operations. Students will work with the teacher to develop menus for the School Café and write the daily job sheets. They will be responsible for Back of the House (food production) and Front of the House (ordering, customer service) duties.

Textiles and Clothing I Course No: FCS9400

AHS
1 Semester
1 Credit

Students study basic textiles, the social and psychological aspects of clothing, wardrobe planning & garment construction. Students must purchase sewing kits and materials for their projects

Textiles and Clothing II Course No: FCS9401

AHS
1 Semester
1 Credit

Students make decisions about buying, creating & maintaining clothing; evaluate manufactured textile products; demonstrate the skills needed to produce, alter, or repair textiles and apparel; and analyze careers in the field. Participants are required to supply their own materials.

Textiles and Clothing III AHS

Course No: FCS9402 1 Semester
1 Credit

Students analyze career paths in the housing, interiors, furnishings, textiles and apparel industries. Math and science skills are utilized in the selection of materials for decorator and apparel items. Communication is emphasized for optimum customer service satisfaction. Students are required to supply their own materials.

Textiles and Clothing IV AHS Course No: FCS9403 1 Semester

rse No: FCS9403 1 Semester 1 Credit

Students explore the business aspects of the fashion industry. They construct apparel items that require special handling and/or advanced construction techniques. Draping, flat pattern design and specialty fabrics and materials will be used. Prerequisite: Clothing and Textile III

Textiles & Clothing: Independent Study/Research

Course No: FCS9405 1 Semester
1 Credit

Students will independently continue their study in the Textile & Clothing Pathway. Each student will design and create projects to be included in a final portfolio. Students will create resumes and explore career opportunities in the fashion and textile fields.

Early Childhood Development I

Course No: FCS9307

AHS/MHS
1 Semester
1 Credit

AHS

This project-based course explores human development theories throughout the lifecycle. Students study the roles, responsibilities and functions of families and family members, gerontology and intergenerational relations, contemporary family issues, change, stress, and family crisis-abuse-violence; community services, agencies and resources. Emphasis is placed on the role of the family and community in meeting the needs of its

members as they progress through life.

Early Childhood Development II

AHS/MHS

Course No: FCS9305

1 Semester 1 Credit

This course focuses on the physical, intellectual, social & emotional development of children. With an understanding of proven child development theories and practices, students will be able to plan for and react to children with developmentally appropriate activities. Creating a safe, healthy environment for children is woven throughout the course. Prerequisite: Human Development or Early Childhood Development I.

Early Childhood Development III

AHS/MHS

Course No: FCS9304

1 Semester 1 Credit

This course prepares students to plan, design, and work in programs that meet children's developmental needs and interests while providing a safe and healthy environment. Prerequisite: Human Development/Early Childhood Development I and Early Childhood Development II.

TECHNOLOGY EDUCATION

Construction & Manufacturing Systems I

MHS

Course No: TE9205 1 Semester 1 Credit

Students acquire the basic knowledge necessary to operate tools and equipment safely. This course will offer hands on, computerized & written activities providing a basic understanding of construction and manufacturing processes and techniques. This course is math intensive and includes written homework assignments/projects designed to compliment existing college courses in construction management. A prior course in algebra, integrated math or geometry is highly recommended.

Construction & Manufacturing Systems II

Course No: TE9206

1 Semester 1 Credit

MHS

Students become familiar with intermediate construction and manufacturing skills as well as advanced tool use. They strengthen their ability to use the tools and equipment necessary to build, test and compare products constructed with a variety of materials. This course offers hands on, computerized and written activities to provide an intermediate-level understanding of processes, techniques and methods. This course is math intensive and includes written homework assignments/projects designed to compliment existing college courses in construction management. Prerequisite: Construction & Man Systems I.

Construction & Manufacturing Systems III

Course No: TE9207

MHS 1 Semester

1 Credit

Students will progress from the lessons learned in Construction and Manufacturing Systems II, becoming familiar with advanced construction and manufacturing skills, theories and understanding. This course offers hands on, computerized model design as well as building & written activities to provide an advanced understanding of construction and manufacturing processes, techniques and methods. The course is math intensive (75% hands on, 25% written)

with written homework assignments/ projects. It is designed to compliment existing college courses in construction management Prerequisite: Junior or Senior, Construction & Manufacturing Systems II.

Drafting & Design: CAD I Course No: TE9201

AHS/MHS 1 Semester 1 Credit

Students explore the drafting skills necessary to produce drawings and understand how these skills will be used to find solutions to design problems. They gain an understanding of drafting and design conventions used to generate and communicate design ideas to stakeholders. Students begin to identify and understand the precise representations and accurate scale drawings essential to industry standards. They investigate, categorize and learn how a working knowledge of computer-aided drafting helps communicate design ideas and solutions, as well as the essential elements of design (research, development, revision and the integration of previous learning experiences).

This course is part I of a 3-part Tech-Prep articulation with DTCC.

Drafting & Design: CAD II AHS/MHS Course No: TE9202 1 Semester 1 Credit

Students will apply the skills acquired in level one as they learn advanced tools of drafting and geometric construction with a focus on architecture. Participants will study design principles, construction practices and building materials involved in the development of residential dwellings. Students will integrate these principles with their CAD knowledge to demonstrate sound architectural designs. A focus of the course will be room planning in three main areas: sleeping and bath, living, and service. Students will gain an understanding of the techniques necessary to create architectural drawings in 2D and 3D. They will demonstrate skills used in the design industry that will increase their marketability in a technical job market. Prerequisite: Drafting & Design-CAD I (TE-9201).

This course is part two of a 3-part Tech-Prep articulation with DTCC.

Drafting & Design: CAD III

AHS/MHS Course No: TE9203 1 Semester 1 Credit

Students will continue to apply the skills learned in levels one and two as they learn advanced tools of drafting and geometric construction with a focus on Engineering. Students will learn about design principles, construction practices and building materials involved in the development of mechanical systems. The course provides understanding of drafting techniques necessary to allow students to create mechanical drawing sets in 2D and 3D. They will apply and demonstrate skills used in today's design industries that will increase their marketability in a technical job market. Prerequisite: Drafting & Design: CAD II (TE-9202).

This course is the third in a 3-part Tech-Prep articulation with DTCC.

Communication Technology Research and Development IV **AHS/MHS**

Course No: TE9204

1 Semester 1 Credit

Students will apply all the knowledge and skills gained from Drafting and Design: CAD I, II & III to identify a problem with an existing design, or one with no solution. They will then apply the design process to develop solutions, create models, test their design and revise it. This course is designed for the student interested in pursuing a career in either Architecture or Engineering and has a work load equivalent to an Advanced Placement course or entry-level college course. They will apply and demonstrate skills used in today's design industries that will increase their marketability in a technical job market. Prerequisite: Drafting & Design: CAD III (TE9203).

TECHNOLOGY EDUCATION

Graphic Design and Production I Course No: TE9601

AHS/MHS

1 Semester 1 Credit

In this introduction to printing and publishing, students will be introduced to layout and design concepts, computerized composition, and digital imaging. This course is designed to give students basic knowledge and understanding of the world of graphic design and the basic skills necessary to begin working within that field. Students will explore basic design techniques, media aesthetics, and projects designed to challenge their creativity while simultaneously modeling skills useful in the graphic design field.

Graphic Design and Production II Course No: TE9602

AHS/MHS

1 Semester 1 Credit

Utilizing skills and knowledge from Graphic Design & Production I, students will work at an intermediate level of design throughout the term. Students will apply their learning through projects such as designing and producing journals, documents, booklets and images. Students will gain experience in areas such as design, copy preparation, photo manipulation, and traditional & digital print production. Prerequisite: Graphic Design & Production I.

Graphic Design and Production III Course No: TE960₄

AHS/MHS

1 Semester 1 Credit

In this capstone course, students will apply skills learned in previous levels as identified individually for each high school below.

AHS DESCRIPTION

Students will continue their course of study from Graphic Design & Production I and II. Students will study photography and digital imaging programs that encourage the student to explore sources of image making. Prerequisite Graphic Design & Production II.

MHS DESCRIPTION

Students will work as professionals in the classroom to build a portfolio for use in interviews and the career field. The primary portfolio item in this course is the capstone project, which represents the conception, design, production, and marketing of the school yearbook. Students will be expected to demonstrate and apply all concepts and techniques learned in Graphic Design & Production I and II, along with personal growth through projects and assignments, in the design and creation of subject matter for the yearbook. This project presents the students with a task similar to what an experienced professional in the design field would be expected to complete. The level of difficulty and the nature of the task is meant to encourage students to find the graphic design area they are most interested in and provide them with a product appropriate for inclusion in an end-of-pathway portfolio and course. Prerequisite: Graphic Design I & II.

Yearbook Introduction

MHS

Course No: EN9602

1 Semester 1 Credit

Students will learn how to layout/design yearbook pages, advertising flyers, newspaper advertising and page editing. Students will design projects using industry-standard software. Students should have a strong familiarity with computers.

Yearbook Production

AHS/MHS

Course No: EN9605

1 Semester 1 Credit

Students will study yearbook writing, editing, design, photography, and marketing & advertising. Students are responsible for planning, designing and producing the yearbook. Some after school and/or weekend work will be required for the course. Interview required.

DRIVERS EDUCATION. **PHYSICAL EDUCATION & HEALTH**

Drivers Education Course No: EL5054 **AHS/MHS** 1 Semester

0.5 Credit

Classroom study precedes driving lab. All students must be academically eligible to participate in the "on the road" training portion of this course. Only grade 10 students who meet the criteria may be enrolled. Students are scheduled according to the date of their sixteenth birthday and academic record.

Health

AHS/MHS Course No: HPE7003

1 Semester 0.5 Credit

This course is designed to provide students with an opportunity to learn about the physical, mental/emotional, and social aspects of health. An emphasis is placed on the importance of making healthy decisions that will lead to a higher quality of life. Course information is presented in a practical manner incorporating current health trends & concerns. Content areas will include: Personality: Stress: Mental Disorders; Relationships; Nutrition; Weight Management; Non-infectious Disease; Human Growth and Development; AIDS and other STDs; Alcohol, Tobacco and other drugs; Personal Safety/First Aid.

Physical Education

AHS/MHS

Course No: HPE7001 1 Semester 0.5 Credit

Fitness activities skill development and concepts of team play are emphasized in this course. Students concentrate on developing a personal fitness plan, lifetime sports and athletic skill acquisition.

JUNIOR RESERVE OFFICER **TRAINING CORPS (JROTC)**

The Junior ROTC program complements the curricula and educational programs of America's high schools, offering students a unique opportunity for personal growth. To a base of American citizenship and history, JROTC adds a battery of values and skills indispensable to success in school & beyond. JROTC teaches self-discipline, confidence, organization, ethics, integrity, responsibility and physical conditioning. JROTC trains students to think on their feet, make decisions, work as team members, motivate themselves and others, and lead. They serve as role models and mentors to their peers, providing strong incentives to stay in school and graduate.

Enrollment is available to students in any grade and JROTC may be taken every year of high school, if desired. JROTC is not a recruitment program for the military. Although some graduating cadets pursue military training, most do not. Participation in JROTC incurs no service obligation whatsoever, nor is it intended to apply any pressure in that direction. All uniforms (worn once weekly), textbook, and related materials for the course are provided at no cost to the student. Air Force JROTC is offered at Middletown High School and Army JROTC is offered at Appoquinimink High School.

Aerospace Science I Course No: ROTC7006

MHS 1 Semester 1 Credit

This foundation course explores the heritage of flight, development of air power, and the role of military aerospace forces in our society. Leadership concepts include an introduction to the ROTC mission, customs and courtesies; proper wear of the uniform; organization; basic drill and ceremonies; the meaning and purpose of attitude, discipline, and respect; principles of good citizenship, personal standards, values, and ethics; leadership and management techniques; organizational skills; good study habits, time management and personal development; and health, drug, and alcohol abuse awareness.

Aerospace Science II Course No: ROTC7011

1 Semester 1 Credit

MHS

Students gain an in-depth knowledge of the aerospace environment; human requirements of flight; principles of flight, propulsion & navigation; and world cultural studies. Leadership concepts stress oral, written and listening communication skills development; understanding individual & group behavior; leadership theory; and advanced drill and ceremonies. Students also learn practical applications in management by applying for positions of responsibility within the corps. Prerequisite: Aerospace I.

Aerospace Science III Course No: ROTC7012

MHS

1 Semester 1 Credit

This course explores aircrew survival; space propulsion systems; space exploration; the historical significance of a civilian/ military venture into space; and the fundamentals of rocketry. Leadership concepts include preparation for life after high school; the importance of obtaining advanced degrees or skills; job search preparations; financial planning; career opportunities; and advanced drill and ceremonies. Students demonstrate increased leadership and management responsibilities through the various staff positions within the corps. Prerequisite: Aerospace Science II.

Aerospace Science IV: Leadership & Management

MHS 1 Semester

Course No: ROTC7013 1 Credit

Students apply the leadership and management principles learned in previous courses by managing the cadet corps. They establish policies & guidelines for the effective planning, organizing, coordinating, and directing all aspects of the corps in a proactive matter. Problemsolving, decision-making, negotiating, managerial, communication and organizational skills are honed. Students will also assist instructors in leadership & academic training. The course is restricted to senior (4th year) cadets and 3rd year cadets who are selected for a key leadership role within the unit through an interview process. Prerequisite: Aerospace Science III.

Military Science I

Course No: ROTC9100

AHS 1 Semester 1 Credit

This foundation course explores the heritage of the U.S. Army and its role in the growth of our nation. Leadership concepts include an introduction to the Army JROTC mission and core values.

Military Science II

AHS

Course No: ROTC9101

1 Semester 1 Credit

Students gain an advanced knowledge of leadership principles, values and behaviors. Leadership theory and application concepts, world cultures, higher-order critical thinking skills and strategies are emphasized. Students learn practical applications in management by applying for positions of responsibility within the Army JROTC. Prerequisite: Military Science I.

Military Science III

AHS

Course No: ROTC9102

1 Semester 1 Credit

This course explores the historical significance of national military and nonmilitary service. This includes the role of each branch of the U.S. Armed Forces. the Merchant Marines, the Peace Corps and other organizations within our federal government. Leadership concepts include preparation for life after high school; the importance of obtaining advanced degrees or skills; job search preparations; financial planning; career opportunities; and advanced drill and ceremonies. Students demonstrate increased leadership and management responsibilities through the various staff positions within the corps. Prerequisite: Military Science II.

Military Science IV: Leadership & Management

AHS

Course No: ROTC9103

1 Semester 1 Credit

Students apply the leadership and management principles learned in previous courses by managing the cadet corps. They establish policies and guidelines to effectively plan, organize, coordinate, and direct all aspects of the corps. Problem-solving, decision- making, negotiating, managerial, communication and organizational skills are honed. Students will also assist instructors in leadership and academic training. Prerequisite: Military Science III.

JOBS FOR DELAWARE GRADS

An approved career pathway, JDG coursework features 16 school to work transition competencies per year designed to help students reach academic & career goals. Participants are eligible for membership in the Delaware Career Association, a youth organization that enhances classroom instruction with field trips, group activities and conferences designed to promote leadership development, citizenship, social awareness and career preparation. A JDG Specialist is available to assist students during school & summer months and provide assistance 12 months after graduation to help students find jobs in the career of their choice.

JDG GRADE 9

Course No: JDG9401

AHS/MHS
1 Semester
1 Credit

Students will review study skills, personal grooming, goal setting, positive attitude, image assessment, autobiography, group dynamics, conflict resolution, life skills math, career path, values clarification, decision-making, & coping with change.

JDG GRADE 10

Course No: JDG9402

AHS/MHS

1 Semester 1 Credit

Coursework includes teamwork, courtesy and respect, goal setting, money management, problem solving, customer service, workplace diversity, workplace math, entrepreneurship, leadership, career interests, insurance, and job application skills. Prerequisite: JDG 9.

JDG GRADE 11

Course No: JDG9403

AHS/MHS

1 Semester 1 Credit

Participants learn about a career vocabulary, listening skills, resume writing, sources of jobs, telephone skills, stress management, personal budgeting, occupational preferences, career manual, verbal presentations, critical thinking, constructive criticism and professional ethics. Prerequisite: JDG 10.

JDG GRADE 12

AHS/MHS

Course No: JDG9404

1 Semester 1 Credit

Students receive instruction in time management, the job application process, career attire, interviewing, job survival, business etiquette, employee rights, performance evaluations, pay and benefits, financial planning, career travel, letter of resignation, & career portfolio. Each senior will develop a Career Portfolio that includes a resume and references, sample job application and recommendations. JDG 12 may be the student's co-op class ONLY if JDG is the student's pathway (the student's third or fourth year of JDG classes) and the counselor approves it. Prerequisite: JDG 11.

PERFORMING ARTS

General Chorus Course No: PA9522

AHS/MHS 1 Semester 1 Credit

This beginner-level class is designed for singers with limited part-singing experience. Training centers on healthy vocal production and sight singing. The ability to match pitch is required. Students should expect to have a private hearing with the instructor prior to the start of the school year. (MHS only: this will occur during the summer before school starts.) Students will also be required to perform in a minimum of three concerts that occur outside of the school day.

Advanced Chorus Course No: PA9527

AHS/MHS 1 Semester 1 Credit

Entrance into Advanced Chorus is gained through successful participation in General Chorus and hearings throughout the year. A variety of 4 or more part vocal music will be performed from all genres. Training will center on healthy vocal production and sight singing. The ability to match pitch is required. Students should expect to have a private hearing with the instructor outside of the school day. (MHS only: this will occur during the summer before school starts.) Several out of school performances will be required during the year.

Piano Keyboarding I Course No: PA9524

AHS/MHS 1 Semester 1 Credit

Students will learn how to play the piano. Major focuses in this course include, but are not limited to, correct piano technique, music theory, scales & short compositions. No prior experience is necessary.

Music Theory I

AHS/MHS

Course No: PA9518

1 Semester 1 Credit

Music Theory will introduce students to the fundamentals of reading, writing, composing, performing, and understanding music. Other genres of music such as jazz, movie scores, pop, and rock may also be explored. Music technology may be used to aid in composition.

AP Music Theory Course No: PA9519

AHS/MHS 1 Semester 1 Credit

This class features fast-paced, detailed instruction in the fundamentals of theory, sight-singing and ear training. It is meant to take the place of a freshman-level college music theory course. Topics include harmonic analysis, composition, solfege, sight singing in Major and minor keys, melodic and harmonic dictation, and study of the standard western classical repertoire. Students must read musical notation fluently to register. Prerequisites: Music Theory I, Class Piano, or a high school performing ensemble and successful audition before a committee.

Music History

AHS

Course No: PA9540

1 Semester 1 Credit

Students learn the history of western music from the 700's through the modern musical era. Topics of study include listening examples, learning the geography and regions of music as it spread through Europe into the New World, and aspects of society that influenced the evolution of music. This course is open to Juniors or Seniors who have taken a high school music course previous to, or concurrent with this course.

Introduction to Guitar

AHS

Course No: PA9104

1 Semester 1 Credit

This course is for beginners who want to learn the basics of playing the guitar and reading guitar music. Topics include: learning chords, melody guitar, power chords, scales/arpeggios, and reading tablature. No experience needed. Students must provide their own guitar.

Marching Band

AHS/MHS 1 Semester 0.5 Credit

Course No: PA9535

Marching Band is a performance-based ensemble that performs at football games and band competitions. Students will be required to attend summer rehearsals and band camp, as well as after school, evening, and weekend rehearsals and performances. Prerequisite: Previous experience in 7th Grade, 8th Grade, or HS Band.

Philharmonic Orchestra

Course No: PA9536

AHS/MHS 1 Semester 1 Credit

The orchestra is a performance-based class wherein the students study a wide variety of musical styles and develop more advanced technical proficiency on their instruments: violin, viola, cello or double bass. In addition to their technical development, students will develop ear training and musicality to supplement their playing in the ensemble. Students will perform in a variety of ensemble situations and some external activities, such as concerts, may be required. Prerequisites: Audition or teacher recommendation.

Percussion Ensemble

MHS

Course No: PA9514

1 Semester 1 Credit

The ensemble is a performance-based class for percussionists. Students must have a good understanding of musical notation. They will learn performance techniques for most percussion instruments and develop an understanding of basic music theory concepts. Students are required to perform in concerts and events outside of the regular school day. Prerequisites: Grade 9 students need percussion experience in 8th Grade Band; 10th-12th graders must have experience in a HS performing ensemble.

Symphonic Band Course No: PA9515

AHS/MHS

1 Semester 1 Credit

Symphonic Band is a performance-based class that welcomes all woodwind, brass and percussionists. Students must have a good understanding of musical notation and how to play their chosen instrument. Students will develop the skills necessary to become an advanced musician and will learn to understand and appreciate the music around them. Students are required to perform in concerts and events outside of the regular school day. Prerequisite: Previous experience in middle school or high school band.

PERFORMING ARTS

Fundamentals of Acting I Course No: PA9505

AHS/MHS
1 Semester
1 Credit

This beginner-level course is designed to provide students with a basic understanding of theatrical performance and drama strategies. Students will participate in a variety of games, exercises, and activities that will help them become aware of how to use their body and voice, and empower them to become more comfortable in public settings. Students will be introduced to several genres of published dramatic pieces including, but not limited to: full-length plays, one-acts, scenes and monologues. Students will also be introduced to basic character development strategies. Improvisation will be a major emphasis. Students will be required to participate in at least one public performance. It is strongly encouraged that the students attend professional and non-professional performances throughout the school year.

Fundamentals of Acting II AHS/MHS

Course No: PA9506 1 Semester

In this course students will strengthen their understanding of theatrical performance. They will study and perform scenes and monologues from modern and contemporary plays. The focus of this course will be character development, and forming an increasing awareness of vocal and physical techniques. Students will be required to participate in at least one public performance. It is strongly encouraged that students attend professional performances throughout the year. Prerequisite: Fundamentals of Acting I.

Fundamentals of Acting III AHS/MHS

Course No: PA9507 1 Semester

In this intermediate course students will strengthen their understanding of theatrical performance. Students will study and perform scenes and monologues from modern and contemporary plays. The focus of this course will be character development, and forming an increasing awareness of vocal and physical techniques. They are required to participate in at least one public performance. It is strongly encouraged that students attend professional performances throughout the year. Prerequisite: Fundamentals of Acting II.

Stagecraft I

Course No: PA9560

MHS
1 Semester
1 Credit

Students enrolled in this course will be introduced to all major aspects of theatrical production. Units of study may include: introduction, to the theatre, costume design, set design, stage management, front of house and scenic painting. Students will be expected to help set-up school events and maintain the theatrethis is a hands-on course. They must participate in at least one public performance and will be required to participate in the technical side of a public performance which will require several hours after the school day. It is strongly encouraged that students attend professional performances throughout the school year.

Stagecraft II

Course No: PA9561

MHS
1 Semester
1 Credit

Students enrolled in this course will continue their study of all major aspects of theatrical production. Units of study may include: costume design, scenic design, scenic painting, set design, stage management, lighting design, front of house management, etc. Students will be required to participate on the technical crew of one of the major school productions. Prerequisite: Stagecraft I.

Musical Theatre Performance/ Theatre Dance AHS/MHS

Course No: PA9510

1 Semester 1 Credit

The three main components of musical theatre are singing, acting and dancing. This course serves as a study of each of these components. Students will be expected to perform individually as well as in groups and must demonstrate a willingness to take direction, take risks, and step out of your comfort zone. The ability to sing on pitch, a strong sense of rhythm, a high level of physical endurance and daily participation in the rehearsal process is required. Students will perform solos, duets and ensemble pieces; analyze, memorize and perform scenes; build a repertoire of dance movements from a variety of styles; and apply movements toward the creation of an original piece of choreography. They are required to participate in at least one public performance. Prerequisite: Fundamentals of Acting I.

VISUAL ARTS

Foundations of Art Course No: VA9100

AHS/MHS
1 Semester
1 Credit

This course is the fundamental art studio class. It emphasizes the elements of art and principles of design through experimentation with two and three-dimensional art experiences. Topics include art vocabulary, critique methods and artist research. Emphasis will be placed on introducing students to various art media that leads to a pathway of Drawing and Painting, Sculpture and Ceramics, Photography or a combination of art courses. \$10 materials fee.

Ceramics and Sculpture I Course No: VA9200

AHS/MHS
1 Semester
1 Credit

This course develops the three-dimensional art techniques through hand building with clay and paper mache. Study includes three-dimensional composition and glazing techniques. Emphasis will be placed on creating artwork that fits contextually with pottery created in various cultures and time periods. \$10 materials fee. Prerequisite: Foundations of Art.

Ceramics & Sculpture II Course No: VA9201

AHS/MHS
1 Semester
1 Credit

This course further develops the 3-dimensional art techniques through wheel thrown pottery, plaster sculpture, and mixed media. Topics of study include artist research, critique methods, and artist symbolism. Emphasis will be placed on creating a personal style. \$10 materials fee. Prerequisite: Foundations of Art, Ceramics and Sculpture I.

Drawing and Painting I Course No: VA9300

AHS/MHS
1 Semester
1 Credit

This course develops the two-dimensional art techniques of drawing and painting through the direct observation of still life objects. Broad topics include color theory, critique methods, linear perspective, calligraphy, and artist research. Emphasis will be placed on exploring various media and techniques. \$10 materials fee. Prerequisite: Foundations of Art.

Drawing and Painting II Course No: VA9301

AHS/MHS
1 Semester
1 Credit

This course further develops the 2-dimensional art techniques of drawing and painting through the subjects of the figure and self-portraits. Broad topics include acrylic painting, printmaking, art criticism, and art careers. Emphasis will be placed on creating a personal style and referencing artists in creating a body of artwork that can be utilized in AP Studio Art. \$10 materials fee. Prerequisite: Drawing and Painting I.

Photography I (Digital) Course No: VA9509

MHS
1 Semester
1 Credit

This course provides experiences in digital photography. Broad topics include basic camera functions, critique methods, photography history and computer manipulation. Emphasis will be placed on composition and realizing the medium as a means of artistic expression. \$10 materials fee. Students must supply a flash drive and digital camera for their personal use.

Photography I (Black & White) AHS Course No: VA9508 1 Semester 1 Credit

Students taking Photo I will be introduced to basic black and white techniques using a 35mm SLR Camera. Students will learn how to process their own film and prints using basic darkroom techniques. Students will also learn how to hand color, tone and mount their own work. A 35mm SLR camera is needed for this class. \$10 materials fee. Prerequisite: Must be a sophomore or higher.

Photography II

Course No: VA9600

AHS/MHS
1 Semester
1 Credit

Students taking Photo II will be building upon their basic knowledge from Photo I. Part of the class will be based on manipulation of negatives and prints, such as double negatives, and continuing learning about basic black and white techniques using a 35mm SLR Camera. \$10 materials fee. Prerequisite: Must have successfully completed Photography I (Digital or Black & White).

AP Art History

MHS

Course No: VA9512

1 Semester 1 Credit

This rigorous course provides the same benefits to high school students as those of an introductory college course. The paintings, sculptures, and architecture of ancient art styles through contemporary art styles will be placed in historical and cultural contexts. Students are required to take the College Board exam for consideration in receiving advanced placement and/or credits at the college level. AP Art History Exam fee. Prerequisite: Junior or Senior.

AP Studio Art

AHS/MHS

Course No: VA9559

1 Semester 1 Credit

This rigorous course provides serious art students with the challenge of creating a body of artwork that demonstrates:

1) quality through a mastery of drawing or design, 2) concentration through an in depth exploration of a particular design concern, and 3) breadth through a variety of media and techniques. Students must submit a 24-piece portfolio to the College Board for consideration in receiving advanced placement and/or credits at the college level. \$10 materials fee.

Prerequisites: Drawing & Painting I and Drawing & Painting II.



Our mission is to provide a world-class education where each of our students gains the knowledge, understanding, skills and attitudes needed to contribute and flourish in a global society.