WELCOME TO MILFORD HIGH SCHOOL

Milford High School’s foremost priority is to provide every student with the skills to pursue their postsecondary college and career dreams. Our mission is clear:

Milford High School will create a safe, nurturing, and academically stimulating environment that will inspire excellence in teaching and life-long learning so that each student will possess the skills and attitudes essential to participate in a diverse and changing world. In partnership with home and community, our mission is to develop citizens who respect themselves and others, value cultural diversity, set goals with a positive attitude, think critically to solve problems, and can adapt to the changing needs of a global society.

Students at Milford High School benefit from a broad range of career majors and celebrated academic opportunities which boast college prep coursework for all students, honors programs in all core areas of study, and opportunities to earn college credit. In addition, students have the advantage of a wide range of athletics, clubs, activities, volunteer opportunities, and a community spirit which is unmatched in Delaware.

To be a Milford Buccaneer is to be part of a tradition and community that will shape your life forever. #wearemilford

Quality Education
Right in Your Neighborhood

Milford School District is an Equal Opportunity Employer and does not discriminate in employment or in educational programs, services, or activities on the basis of race, color, national origin, sex, sexual orientation, age, disabilities, marital status, genetic information, or Veteran Status. Contact the Title IX Coordinator or the District 504 and ADA Coordinator, 906 Lakeview Avenue, Milford, Delaware 19963. Telephone 302-422-1600.
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What is a graduation major?
Students must complete a major to graduate. Each major has a required set of three (3) courses that are beyond the core courses required for graduation. In addition to the course requirements, students will have opportunities to choose additional coursework. Students should work with their parents and school counselors to select the best major for graduation, preparing them for college and a career.

Milford High School’s program of study includes four components:
2. Three-course major in a specific college or career area.
3. Opportunities for Dual Enrollment, Advanced College Standing, Articulated College Credit, and/or Advanced Placement (AP) courses.
4. Opportunities for industry certifications and actual career experience through off-campus work-based learning employment or internship experiences.
GRADUATION REQUIREMENTS

Graduation Requirements
The Milford School District has rigorous requirements for our students in order to ensure that they are prepared for college and career success. Program specifics are on the following pages and outline the options students have to complete their requirements. A major is a set of three courses that prepares a student for college and career success.

Incoming freshmen will select a major as part of their enrollment in Milford High School. Students are encouraged to work with parents, school counselors, teachers, and administrators to select the major that best prepares them for college and career readiness. When making this choice there are two important factors to consider: Are these choices consistent with your career plans, and are these choices commensurate with your academic abilities and performance? If the answer is yes to both questions, this is the right major for you!

Minimum Graduation Requirements

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Major</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
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<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
</tr>
<tr>
<td>Additional Social Studies or Science</td>
<td>1</td>
</tr>
<tr>
<td>World Languages</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Health Education</td>
<td>.5</td>
</tr>
<tr>
<td>Electives</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25 CREDITS</strong></td>
</tr>
</tbody>
</table>

COURSE LEVELS

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

Honors (H)
Honors courses are designed to prepare students for the rigors of AP and Dual Enrollment courses in various subjects. These courses move at an accelerated pace and often have more outside reading and homework requirements. All students are encouraged to apply to these programs.

Advanced Placement (AP)
AP courses prepare students for college work and are equivalent to freshman courses at a university. These courses teach students to think more deeply about complex college concepts. Successful completion of the course offers students the opportunity to sit for the Advanced Placement exam for college credits. Most exams are worth 3 college credits, but can count for up to 8 college credits. While the acceptance of these scores varies from school to school, all colleges consider strength of schedule in the admissions process. AP courses help distinguish a student in this process. Students who take AP Courses are required to take the exam to receive the weighted credit for the course in their cumulative GPA. Tests are in May and financial aid is available for students who qualify.

Milford High School AP Courses

| AP Biology                      | AP Human Geography |
| AP Calculus AB                 | AP Physics 1       |
| AP Chemistry                   | AP Psychology      |
| AP Computer Science A          | AP Spanish Language & Culture |
| AP Computer Science Principles | AP Statistics      |
| AP English Language and Composition | AP U.S. Government & Politics |
| AP English Literature and Composition | AP U.S. History     |
| AP Environmental Science      |                    |
EARN COLLEGE CREDIT IN HIGH SCHOOL

1. Earn college credit while enrolled at Milford High School
Dual enrollment courses are college courses taught by Milford High School faculty. MHS faculty act as adjunct professors and teach the college course during the school day. Students taking Dual Enrollment courses earn high school and college credit at the same time. Students receive a transcript from the partnering college once credit is earned.

2. Earn articulated credit in a Milford High School course
Articulated credit is awarded when a student takes a course or series of courses at Milford High School, earns at least an 85%, and then enrolls in the partnering institution. Students who enter college in remedial courses do not receive the articulated credit.

3. Take a course at a local College or University
Local area institutions of higher education offer special programming for students interested in taking college courses on campus prior to high school graduation. Such courses can be taken during summer months, after school hours, or during school with special arrangement for school release. Such an experience can be a valuable experience for students.

   - DSU Early Bird Program
     https://www.desu.edu/admissions/early-bird-program
     Requirements: Letter of Recommendation, 3.0 GPA, 6 free credits maximum, or 2.5 GPA, 6 credit maximum, pay full tuition
   - Wilmington University Early College Credit Program
     http://www.wilmu.edu/earlycollege
     Requirements: 2.7 GPA, commitment to hard work, $32 per credit + $25 registration fee, submit application
   - Delaware Technical Community College
     Requirements: Must be 16 years of age, pay full tuition
     https://www.dtcc.edu/admissions-financial-aid/programs-hs-students

4. Academic Challenge
Academic Challenge is a specialized program through Delaware Technical Community College. Students apply for admission at the end of 7th grade and begin taking courses at the Owens Campus in Georgetown during 8th grade. Milford School District provides transportation and counselors work with students to schedule courses during the school day. Academic Challenge students earn college credit for courses taken in the Academic Challenge program.

BECOME COLLEGE READY

PSAT & SAT
All Milford High School students take College Board exams in 9th, 10th, and 11th grade. The fall administration of the PSAT in 11th grade enables students to be eligible for the National Merit Scholarship. These exams are administered free of charge. Students can upload their scores to Khan Academy to receive individualized tutoring activities.

BECOME CAREER READY

Work-Based Learning
Students who complete a Career Technical Education (CTE) major are eligible for work-based learning. Students in work-based learning secure internships and/or paid employment in their field of study. They are released to work during school hours and earn high school credit for their work experience. Work-based learning students provide their own transportation. Students’ employers rate their performance and students must validate their work experience through records and assignments. The work-based learning coordinator monitors students and assigns a grade. Work-based learning experiences are a great addition to any resume.

BE A STUDENT ATHLETE

Academic Eligibility Requirements for Athletics
Delaware Interscholastic Athletic Association (DIAA) governs all Delaware athletics. In order to participate in high school athletics, the student must pass at least five (5) credits, two (2) of which must be core courses in English, math, social studies, and/or science. All seniors must be passing every class they need for graduation. At the beginning of the year a student must have passed 5 credits, two of which must be core classes from the previous school year.
SCHOOLS AND MAJORS

School of Agriscience

Animal Science & Management
- Foundations of Animal Science (FAS)
- Growth and Development of Domestic Animals (GDDA)
- Domestic Animal Management (DAM)

Food Science
- Food Science I
- Food Science II
- Food Science III

School of Health Sciences

Allied Health
- Fundamentals of Health Science (FHS)
- Essentials of Health Careers
- BIO 120: Anatomy & Physiology I

Public and Community Health
- Fundamentals of Health Sciences (FHS)
- Essentials of Public & Community Health (EPCH)
- Personal Wellness (PW)

Sports & Health Sciences
- A combination of three of the following courses:
  - Fundamentals of Health Science
  - Essentials of Health Careers
  - Anatomy & Physiology
  - Strength Training
  - Fitness Training
  - Team Sports

School of Modern Studies

Humanities
- A combination of three English and/or Social Studies courses above the requirements for graduation.

Spanish
- Spanish III
- Spanish IV
- AP Spanish Language & Culture

School of Business & Finance

Academy of Finance
- Fundamentals of Finance
- Principles of Accounting
- Financial Services

Business Management (ending 2020-2021)
- Business Management III

School of Art & Design

Digital Communication Technology
- Foundations of Digital Design (FDD)
- Processes of Digital Production (PDP)
- Applications of Digital Design (ADD)

Performing Arts
- A combination of three performing arts courses including band, choir, and drama.

Visual Arts
- A combination of three visual arts courses including art, digital design technology, and yearbook.

School of Science, Technology, Engineering, & Math

Computer Science
- Exploring Computer Science
- AP Computer Science Principles
- AP Computer Science A

Engineering
- Introduction to Engineering
- Principles of Engineering
- Engineering Design and Development

School of Education & Career Studies

College Scholars
- A combination of three AP or Dual Enrollment courses above the requirements for graduation.

K-12 Teacher Academy
- Human Growth and Development
- Teaching as a Profession
- Foundations of Curriculum and Instruction

Jobs for Delaware Graduates
- JDG 9
- JDG 10
- JDG 11
- JDG 12
Animal Science and Management

COURSE SEQUENCE

Foundations of Animal Science (FAS)
Growth and Development of Domestic Animals (GDDA)
Domestic Animal Management (DAM)

STUDENT ORGANIZATION

Students compete at Delaware State Fair and National FFA Conventions.

SUPERVISED AGRICULTURAL EXPERIENCE (SAE)

SAE includes: entrepreneurship, placement, agriscience research, agricultural service learning, exploratory, improvement, supplemental and directed school laboratory.

FUTURE CAREERS

- Veterinarian
- Horse Breeder
- Zoologist
- Animal Rescue
- Farmer
- Wildlife Manager
- Veterinary Technologist

SUMMARY OF MAJOR

The Animal Science & Management program is a three (3) course hands-on program of study that explores: animal production and management, physical restraint and handling, conducting health exams, evaluation of behavior, principles of genetics and reproduction, animal selection through evaluation, anatomy and physiology, animal nutrition, basic veterinary practices, global food systems, ethics of food animal production, and current agricultural issues in order to foster an understanding of the steps involved in producing and marketing products for consumers. Students practice decision-making and research skills through classroom instruction, laboratory activities, and practical experiences.

COLLEGE CREDIT

Students who complete the Animal Science major receive the following articulated credits:

University of Delaware
ANFS 166: Independent Study, Animal & Food
Delaware State University
AGRI 206: Introduction to Animal Science

STATE OF THE ART FACILITY

Milford Agriscience barn and working farm provides students hands-on opportunities.

School of Agriscience

Animal Science Major Requirements

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested Electives:</td>
<td>Any additional Agriscience Courses</td>
<td>Spanish III</td>
<td>Spanish IV</td>
</tr>
<tr>
<td>3.5 Credit Minimum</td>
<td></td>
<td></td>
<td>AP Spanish Language &amp; Culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOC 111: Sociology</td>
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<tr>
<td></td>
<td></td>
<td>Work-Based Learning</td>
<td></td>
</tr>
</tbody>
</table>

ANIMAL SCIENCE COURSE DESCRIPTIONS

FOUNDATIONS OF ANIMAL SCIENCE (FAS)
Level: College Prep
Prerequisite: None
Credit: 1

This introductory course focuses on the fundamentals of animal science which include animal origin, domestication and uses, careers in the animal industry, animal safety and sanitation, ways animals help humans, taxonomy and breeds, basic nutrition and health, biosecurity principles and environmental conditions on animals and animal rights vs. welfare. Students are introduced to the foundational leadership skills, responsibility, and cooperation needed to be a successful and productive citizen through a school-based agricultural education three-component model which includes FFA activities, Supervised Agricultural Experience programs, and career and leadership development events.

GROWTH AND DEVELOPMENT OF DOMESTIC ANIMALS (GDDA)
Level: College Prep
Prerequisite: Foundations of Animal Science (FAS)
Credit: 1

This course hands-on program of study that explores: animal production and management, physical restraint and handling, conducting health exams, evaluation of behavior, principles of genetics and reproduction, animal selection through evaluation, anatomy and physiology, animal nutrition, basic veterinary practices, global food systems, ethics of food animal production, and current agricultural issues in order to foster an understanding of the steps involved in producing and marketing products for consumers. Students practice decision-making and research skills through classroom instruction, laboratory activities, and practical experiences.

DOMESTIC ANIMAL MANAGEMENT (DAM)
Level: College Prep
Prerequisite: Completion of Major
Credit: 1

Students will complete a Supervised Agricultural Experience (SAE) Project and are encouraged to join the FFA, an integral, co-curricular part of the Agriscience Program.
Food Science

**SUMMARY OF MAJOR**
This program of study offers career exploration concerning the handling and processing of food, food packaging and labeling, food safety, and issues in food science. Students will receive hands-on instruction that includes dairy product testing, identification of retail cuts of meat, as well as fish processing and more. A special emphasis is placed upon workforce opportunities in the region through partners such as Purdue. Students will have opportunities for internships and hands on experience in these industries.

**COLLEGE CREDIT**
Students who complete the Food Science major receive the following articulated credits:

- University of Delaware
  - ANFS 166: Independent Study, Animal & Food
- Delaware Technical Community College
  - FYS 100: Intro to Food Science

**FUTURE CAREERS**
- Food Scientist
- Quality Assurance Expert
- Food Production Specialist
- Food Safety Inspector
- Biotechnologist

**Food Science Major Requirements**
The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements:</td>
<td>Food Science I</td>
<td>Food Science II</td>
<td>Food Science III</td>
</tr>
<tr>
<td>3 Credits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested Electives:</td>
<td>Any additional Agriscience Courses</td>
<td>Spanish III</td>
<td>Spanish IV</td>
</tr>
<tr>
<td>3.5 Credit Minimum</td>
<td></td>
<td>AP Spanish Language &amp; Culture</td>
<td>SOC 111: Sociology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work-Based Learning</td>
<td></td>
</tr>
</tbody>
</table>

**FOOD SCIENCE COURSE DESCRIPTIONS**

**FOOD SCIENCE I**
Level: College Prep  
Credit: 1  
Prerequisite: None  
This course will serve as an introduction to level II and III. It will include career exploration, handling and processing of food, food packaging and labeling, food safety, and issues in food science. Students will receive hands-on instruction that includes dairy product testing, identification of retail cuts of meat, as well as fish processing and more. In future courses students explore topics such as meat processing, cheese making and the biotechnology behind our food supply.

**FOOD SCIENCE II**
Level: College Prep  
Prerequisite: Food Science I  
Credit: 1  
This course will include career exploration, a further understanding of food processing and issues related to food science, meat processing, cheese making, and biotechnology as it relates to the food science industry.

**FOOD SCIENCE III**
Level: College Prep  
Prerequisite: Food Science II  
Credit: 1  
This course will include career exploration and will build upon the previous course topics. Students will focus on sustainability from a farm to table aspect of the food science industry.

**FOOD SCIENCE WORK-BASED LEARNING**
Credit: 1 or More Determined by Work Hours  
Prerequisite: Completion of Major  
Work-based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.

*Students will complete a Supervised Agricultural Experience (SAE) Project and are encouraged to join the FFA, an integral, co-curricular part of the Agriscience Program.*
The Plant Science program of study is a three (3) course Career & Technical Education (CTE) instructional program designed to provide students with knowledge of plant growth and reproduction, as well as the use of plants for food, fiber, and ornamental purposes. The program prepares students for a variety of careers in: agronomy, ornamental horticulture, biotechnology, forestry, soil science, and turf management.

COLLEGE CREDIT

Students who complete the **Greenhouse & Horticulture Science** major receive the following articulated credits:

- **University of Delaware**
  - ANFS 166: Independent Study, Animal & Food
- **Delaware State University**
  - AGRI 219: General Horticulture

**SUMMARY OF MAJOR**

The Plant Science program of study is a three (3) course Career & Technical Education (CTE) instructional program designed to provide students with knowledge of plant growth and reproduction, as well as the use of plants for food, fiber, and ornamental purposes. The program prepares students for a variety of careers in: agronomy, ornamental horticulture, biotechnology, forestry, soil science, and turf management.

**FUTURE CAREERS**

- Plant Breeder
- Soil and Water Specialist
- Plant Pathologist
- Greenhouse Manager
- Agronomist

**STUDENT ORGANIZATION**

Students compete at Delaware State Fair and National FFA Conventions.

**SUPERVISED AGRICULTURAL EXPERIENCE (SAE)**

SAE includes: entrepreneurship, placement, agriscience research, agricultural service learning, exploratory, improvement, supplemental and directed school laboratory.

**COURSE SEQUENCE**

<table>
<thead>
<tr>
<th>Foundations of Plant Science (FPS)</th>
<th>Plant and Soil Systems (PSS)</th>
<th>Plant Systems Management and Sustainability (PSMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 9</td>
<td>Grade 10</td>
<td>Grade 11</td>
</tr>
<tr>
<td>3 Credits</td>
<td>Any additional Agriscience Courses</td>
<td>Spanish III</td>
</tr>
</tbody>
</table>

**GREENHOUSE & HORTICULTURE SCIENCE COURSE DESCRIPTIONS**

- **FOUNDATIONS OF PLANT SCIENCE (FPS)**
  - Level: College Prep
  - Prerequisite: None
  - Credit: 1
  - Foundations of Plant Science (FPS) explores the plant industries and food system of the United States in order to foster an understanding of the steps involved in growing crops for food, as well as plants for ornamental and aesthetic purposes. Students study the major characteristics of plant life, plant structures and functions, nutrient needs of plants, fundamentals of soil science, water management, cultural practices, pest management, and explore career options in the horticulture industry through classroom and laboratory instruction. Students are introduced to the foundational leadership skills, responsibility, and cooperation needed to be a successful and productive citizen through a school-based agricultural education three-component model which includes FFA activities, Supervised Agricultural Experience programs, and career and leadership development events.

- **PLANT AND SOIL SYSTEMS (PSS)**
  - Level: College Prep
  - Prerequisite: Foundations of Plant Science
  - Credit: 1
  - Plant & Soil Systems (PSS) enables students to build on the knowledge and experiences gained fundamentals of plant and soil science. Students apply knowledge and concepts of plant science, soil science, water management, pest management, and various crop production characteristics through hands on laboratory and experiential learning. PSS uses a combination of classroom and laboratory instruction that includes land labs, greenhouses, landscape beds, floral production, and hydroponics. Students develop leadership skills, increase levels of responsibility, and engage in cooperative activities through FFA activities, Supervised Agricultural Experience programs, and career and leadership development events through a school-based three-component agricultural education model.

**PLANT SYSTEMS MANAGEMENT AND SUSTAINABILITY**

- **PLANT SYSTEMS MANAGEMENT AND SUSTAINABILITY (PSMS)**
  - Level: College Prep
  - Prerequisite: Plant and Soil Systems
  - Credit: 1
  - Plants Systems Management & Sustainability (PSMS) enables students to apply principles of horticulture production and facility maintenance and design. Students learn soil conservation and land management practices, as well as concepts related to integrated pest management and how to properly use and apply pesticides, as well as principles of business management and record keeping. Students explore global economic systems, sustainability of plant life, and the multifaceted role plants play in sustaining and improving the quality of life. Students apply skills gained through Supervised Agricultural Experience programs, FFA leadership activities, and career and leadership development events to better serve the community through a school-based three-component agricultural education model.

**GREENHOUSE AND HORTICULTURE SCIENCE WORK-BASED LEARNING**

- **Credit: 1 or More Determined by Work Hours**
- Prerequisite: Completion of Major
- Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.

*Students will complete a Supervised Agricultural Experience (SAE) Project and are encouraged to join the FFA, an integral, co-curricular part of the Agriscience Program.*
SUMMARY OF MAJOR

This major is designed to provide students with the scientific principles and methods required to understand the interrelationships of construction. Students practice real world applications and problem solving skills associated with agricultural designs and engineering principles. Students utilize problem solving, as well as communication skills to develop engineering concepts and building practices that are sound and reliable. The program prepares students for a variety of careers including carpentry, engineering, architectural design, electrical, plumbing, masonry, construction framing, business management, sales, building maintenance, home improvement, and green energy technologies.

FUTURE CAREERS

- Carpenter
- Welder
- Builder
- Mechanic

SUPERVISED AGRICULTURAL EXPERIENCE (SAE)

SAE includes: entrepreneurship, placement, agriscience research, agricultural service learning, exploratory, improvement, supplemental and directed school laboratory.

STUDENT ORGANIZATION

Students compete at Delaware State Fair and National FFA Conventions.

AGRICULTURAL STRUCTURES AND ENGINEERING COURSE DESCRIPTIONS

**Fundamentals of Agricultural Structures & Engineering (FASE)**
- Level: College Prep
- Prerequisite: None
- Credit: 1

Fundamentals of Agricultural Structures & Engineering (FASE) provides students a variety of experiences in the fields of agricultural structures and engineering. Students engage in hands-on projects reading and developing construction plans and drawings, evaluating site preparation techniques, selecting wood types, constructing buildings, and tool identification, use and safety. Students participate in project based instruction and apply principles of agricultural structures and engineering.

**Structural Systems in Agriculture (SSA)**
- Level: College Prep
- Prerequisite: Structure & Systems Technology I
- Credit: 1

Structural Systems in Agriculture (SSA) enables students to build on the knowledge and experiences gained in FASE. Students design, plan and construct small structures that directly relate to large scale construction projects. SSA includes hands-on experiences for students to expand their skills in advanced equipment and engineering applications, electrical wiring, and plumbing.

**Essential Skills in Agricultural Structures & Engineering (ESASE)**
- Level: College Prep
- Prerequisite: Structure & Systems Technology II
- Credit: 1

Essential Skills in Agricultural Structures & Engineering (ESASE) provides students with the scientific principles and methods required to incorporate the skills and knowledge needed to be employed in agricultural structures and related agricultural industries. Students will learn HVAC principles, concrete and masonry skills, advanced woodworking skills, and various interior building finishing techniques needed to complete an agricultural structure.

**Structural Systems in Agriculture (FASE)**
- Level: College Prep
- Prerequisite: Structure & Systems Technology I
- Credit: 1

Structural Systems in Agriculture (FASE) provides students with the scientific principles and methods required to understand the interrelationships of construction. Students practice real world applications and problem solving skills associated with agricultural designs and engineering principles. Students utilize problem solving, as well as communication skills to develop engineering concepts and building practices that are sound and reliable. The program prepares students for a variety of careers including carpentry, engineering, architectural design, electrical, plumbing, masonry, construction framing, business management, sales, building maintenance, home improvement, and green energy technologies.

**Essential Skills in Agricultural Structures & Engineering (ESASE)**
- Level: College Prep
- Prerequisite: Structure & Systems Technology II
- Credit: 1

Essential Skills in Agricultural Structures & Engineering (ESASE) provides students with the scientific principles and methods required to understand the interrelationships of construction. Students practice real world applications and problem solving skills associated with agricultural designs and engineering principles. Students utilize problem solving, as well as communication skills to develop engineering concepts and building practices that are sound and reliable. The program prepares students for a variety of careers including carpentry, engineering, architectural design, electrical, plumbing, masonry, construction framing, business management, sales, building maintenance, home improvement, and green energy technologies.

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- Level: College Prep
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- Level: College Prep
- Prerequisite: Structure & Systems Technology II
- Credit: 1

Essential Skills in Agricultural Structures & Engineering (ESASE) provides students with the scientific principles and methods required to understand the interrelationships of construction. Students practice real world applications and problem solving skills associated with agricultural designs and engineering principles. Students utilize problem solving, as well as communication skills to develop engineering concepts and building practices that are sound and reliable. The program prepares students for a variety of careers including carpentry, engineering, architectural design, electrical, plumbing, masonry, construction framing, business management, sales, building maintenance, home improvement, and green energy technologies.
### Academy of Finance

#### SUMMARY OF MAJOR
The Academy of Finance (AOF) major engages students with the world of financial services by focusing on banking and credit, financial planning, accounting, and insurance. Students gain career knowledge through a series of work-based learning activities that are conducted in school and outside of the classroom, and a summer internship.

#### COLLEGE CREDIT
Students who successfully complete the AOF major will receive articulated credit at Delaware Technical Community College for the following courses:

**BUS 101: Introduction to Business**
**SSC 130: Where's My Money**
**SSC 131: Are You Credit Worthy?**
**SSC 132: Planning for the Beach**

The Dual Enrollment ACC 101: Accounting I course is available to students at Milford High School upon completion of the major through Delaware Tech.

The National Academy of Finance (NAF) partners with thirteen (13) colleges and universities across the country to award advanced credit for Academy of Finance (AOF) program completion. For more information please visit www.naf.org.

#### SCHOOL OF BUSINESS & FINANCE

### Academy of Finance Major Requirements
The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
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</thead>
<tbody>
<tr>
<td><strong>Major Requirements:</strong></td>
<td><strong>Fundamentals of Finance</strong></td>
<td><strong>Principles of Accounting</strong></td>
<td><strong>Financial Services</strong></td>
</tr>
<tr>
<td>3 Credits</td>
<td></td>
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<tr>
<td><strong>Suggested Electives:</strong></td>
<td><strong>Business, Finance, &amp; Marketing</strong></td>
<td><strong>Any additional Business &amp; Finance Courses</strong></td>
<td><strong>Spanish III</strong></td>
</tr>
<tr>
<td>3.5 Credit Minimum</td>
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<td></td>
<td><strong>Spanish IV AP Spanish Language &amp; Culture</strong></td>
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<td></td>
<td><strong>ACC 101: Accounting I Work-Based Learning</strong></td>
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</tbody>
</table>

### ACADEMY OF FINANCE COURSE DESCRIPTIONS

#### FUNDAMENTALS OF FINANCE
*Level: College Prep*  
*Credit: 1*  
*Prerequisite: None*  
Fundamentals of Finance (FOF) explores the foundation of financial literacy, the function of finance in society, and the role of a financial planner. This course focuses on income and wealth, financial institutions, and the role of finance in organizations. Students research the impact of technology on the financial services field, explore the role of a financial planner, and examine the importance of sound financial planning. An integrated culminating project provides an opportunity for students to demonstrate expertise on issues critical to financial independence.

#### PRINCIPLES OF ACCOUNTING
*Level: College Prep*  
*Credit: 1*  
*Prerequisite: Fundamentals of Finance*  
Principles of Accounting provides students with an understanding of the critical accounting process and how it facilitates decision making by providing data and information to internal and external stakeholders. Technology will be used for internal decision making, planning, and control.

#### FINANCIAL SERVICES
*Level: College Prep*  
*Credit: 1*  
*Prerequisite: Principles of Accounting*  
Financial Services provides students with the history of money and banking and the origins of banking in the United States. Students will learn to research and discriminate between investment options through an in-depth study of the financial services industry and are also introduced to the insurance industry and the critical role of insurance in the financial services sector.

#### ACADEMY OF FINANCE WORK-BASED LEARNING
*Credit: 1 or More Determined by Work Hours*  
*Prerequisite: Completion of Major*  
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.

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**www.bpa.org**

**www.naf.org**

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Milford High School Catalog
SUMMARY OF MAJOR

Students in this major focus on career opportunities dedicated to performing administrative and managerial processes vital to the success and ongoing existence of a business organization, regardless of the sector or industry. This program of study will build on the skills learned through electronic communications, publishing documents, projects, and active participation in Business Professionals of America. Students will use Microsoft Office Suite and/or Adobe Creative Suite software packages.

COLLEGE CREDIT

Students who complete the Business Management major receive the following articulated credits:

Goldy-Beacom College
ITG 148: Desktop Applications MS Word
ITG 149: Desktop Applications MS Excel

Delaware Technical Community College
BUS 101: Intro to Business

Wilmington University
BBM 102: Intro to Business
BCS 206: Computer Applications for Business

Students completing this major are encouraged to take Dual Admission course Delaware Technical Community College ACC 101: Accounting I
**SUMMARY OF MAJOR**

Students will apply knowledge and skills learned to develop business and marketing plans, research and analyze companies, prepare trend and product analysis, set a marketing budget, evaluate the 4 P’s of companies, and use the SWOT analysis. Career planning and development will also be covered in this major. Simulations incorporating knowledge acquired will be used relative to business marketing management, including distribution placement and product management.

**DECA**

DECA is a national student organization that aims to prepare emerging leaders and entrepreneurs for careers in marketing, finance, hospitality, and management in high schools. Each year students participate in state-wide conference and competitions in topics such as business plan, accounting applications, advertising campaign, and creative marketing project. www.deca.org

Students compete in state and national competitions on an annual basis.

**FUTURE CAREERS**

- Marketing Specialist
- Marketing Researcher
- Small Business Owner
- Sales Associate
- Sales Manager
- Entrepreneur

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**COURSE SEQUENCE**

Marketing II
Marketing III

**STUDENT ORGANIZATIONS**

**DECA**

DECA is a national student organization that aims to prepare emerging leaders and entrepreneurs for careers in marketing, finance, hospitality, and management in high schools. Each year students participate in state-wide conference and competitions in topics such as business plan, accounting applications, advertising campaign, and creative marketing project. www.deca.org

Students compete in state and national competitions on an annual basis.

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**MARKETING COURSE DESCRIPTIONS**

**MARKETING II**

Level: College Prep
Prerequisite: Business, Finance, & Marketing
Credit: 1

This course builds on the BFM course for those students focusing on careers that create, communicate and deliver value to customers and manage customer relationships in ways that benefit the organization and its stakeholders. Instruction will include marketing, promotion, production, placement, and pricing. Other factors include marketing budget, staff growth and development, marketing strategies, product development, advertisement, and business goals and objectives. Students will also be exposed to creating and delivering sales demonstrations, the selling process, and developing clientele. Simulations incorporating knowledge acquired will be used relative to sports & entertainment management, retail management, and restaurant management.

**MARKETING III**

Level: College Prep
Prerequisite: Marketing II
Credit: 1

This course is the exit course for the Marketing major. It builds on the prior knowledge learned in the BFM and Marketing II course. Students will apply knowledge and skills learned in the prerequisite courses by developing business and marketing plans, researching and analyzing companies, preparing trend and product analysis, setting a marketing budget, evaluating the 4 P’s of companies and using the SWOT analysis. Career planning and development will also be covered in this course. Simulations incorporating knowledge acquired will be used relative to business marketing management, including distribution placement and product management.

**SCHOOL OF BUSINESS & FINANCE**

**MARKETING MAJOR REQUIREMENTS**

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements:</td>
<td>Marketing II</td>
<td>Marketing III</td>
<td>3 Credits</td>
</tr>
<tr>
<td>Suggested Electives:</td>
<td>Any additional Business &amp; Finance Courses</td>
<td>Spanish III</td>
<td>AP Psychology</td>
</tr>
<tr>
<td>3.5 Credit Minimum</td>
<td></td>
<td>Spanish IV</td>
<td>AP Spanish Language &amp; Culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SOC 111: Sociology</td>
<td>ACC 101: Accounting I</td>
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<td></td>
<td></td>
<td></td>
<td>Work-Based Learning</td>
</tr>
</tbody>
</table>

**MARKETING WORK-BASED LEARNING**

Credit: 1 or More Determined by Work Hours
Prerequisite: Completion of Major
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.
The National Honor Society (NHS) is the nation’s premier organization established to recognize outstanding high school students. It is estimated that more than one million students participate in NHS activities.

College Scholars

College Scholars Major Requirements

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English:</td>
<td>4 Credits</td>
<td>English 9 or higher</td>
<td>English 10 or higher</td>
<td>English 11 or higher</td>
</tr>
<tr>
<td>Mathematics:</td>
<td>4 Credits</td>
<td>Algebra I or higher</td>
<td>Geometry or higher</td>
<td>Algebra II or higher</td>
</tr>
<tr>
<td>Choose one:</td>
<td>AP Calculus AB</td>
<td>AP Statistics</td>
<td>MAT 153: College Math &amp; Statistics</td>
<td></td>
</tr>
<tr>
<td>Science:</td>
<td>3 or 4 Credits</td>
<td>Physical Science or higher (Graduation Requirement)</td>
<td>Biology or higher (Graduation Requirement)</td>
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</tr>
<tr>
<td>Choose one:</td>
<td>AP Biology</td>
<td>AP Chemistry</td>
<td>Earth Science</td>
<td>AP Environmental Science</td>
</tr>
<tr>
<td>Social Studies:</td>
<td>3 or 4 Credits</td>
<td>Human Geography or AP Human Geography</td>
<td>U.S. Government &amp; Economics or AP U.S. Government &amp; Politics</td>
<td>U.S. History or AP U.S. History</td>
</tr>
<tr>
<td>Health:</td>
<td>1 Credit</td>
<td>Health/Driver’s Education</td>
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<td></td>
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<tr>
<td>Physical Education:</td>
<td>1 Credit</td>
<td>Physical Education</td>
<td></td>
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</tr>
<tr>
<td>Spanish:</td>
<td>2 Credits</td>
<td>Spanish I or higher</td>
<td>Spanish II or higher</td>
<td></td>
</tr>
<tr>
<td>Major Requirements:</td>
<td>3 Credits</td>
<td>Additional Dual Enrollment/AP Course</td>
<td></td>
<td></td>
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<tr>
<td>Suggested Electives:</td>
<td>3.5 Credit Minimum</td>
<td>Spanish III</td>
<td>AP Psychology</td>
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</tr>
</tbody>
</table>

AP Scholar Awards

The AP Scholar Awards recognize high school students who have demonstrated exemplary college-level achievement on AP Exams. The following academic distinctions are awarded:

• AP Scholar: Granted to students who receive scores of 3 or higher on three or more AP Exams
• AP Scholar with Honor: Granted to students who receive an average score of at least 3.25 on all AP Exams taken, and scores of 3 or higher on four or more of these exams
• AP Scholar with Distinction: Granted to students who receive an average score of at least 3.5 on all AP Exams taken, and scores of 3 or higher on five or more of these exams
• State AP Scholar: Granted to the one male and one female student in each U.S. state and the District of Columbia with scores of 3 or higher on the greatest number of AP Exams, and then the highest average score (at least 3.5) on all AP Exams taken
• National AP Scholar: Granted to students in the United States who receive an average score of at least 4 on all AP Exams taken, and scores of 4 or higher on eight or more of these exams
SUMMARY OF MAJOR

The Jobs for Delaware Graduates (JDG) major is designed to help students reach academic and career goals. The curriculum includes 16 school-to-work transition competencies per year. JDG is committed to preparing the students of Milford High School for real world job experience. Each competency delivers an impactful job skill or soft skill that students will need to be successful in employment. The experiential learning experiences will prepare students for a business, teaching, or marketing major in college. This is an excellent major for students who want to go directly into the workforce after graduation. The JDG Specialist is available to assist students in finding jobs in the career of their choice during the school year, in the summer, and for 12 months following graduation.

2004 GRADUATE OF JOBS FOR DELAWARE

Latoria J. Ellis is a 2004 Milford High School graduate and Jobs for Delaware Graduates (JDG) major. While in high school she was elected state-wide Vice President of the Delaware Career Association. She attributes JDG with helping her become a better public speaker, improve her communication skills, and have more confidence. Ms. Ellis has since earned several post secondary degrees and owns her own business. She said, “I am truly thankful for everything JDG has done for me.”
SUMMARY OF MAJOR
The Delaware K-12 Teacher Academy engages students in developing a realistic understanding of teaching while exploring the importance and impact of teachers. Students will acquire the knowledge and skills needed to sustain their interest in the profession and cultivate the skills needed to be successful educators, thus creating a pipeline of high-quality candidates transitioning to the teaching profession. Students will understand the rigor of a career in education and participate in classroom and field experiences relevant to pursuing a degree in education.

COLLEGE CREDIT
Students completing the K-12 Teacher Academy major are encouraged to take core area Dual Enrollment and Advanced Placement courses to complement this major area.

TEACH IN MILFORD!
All K-12 Teacher Academy graduates who go on to complete a college degree in education and are certified to teach in Delaware will be guaranteed an interview for an available teaching position with the Milford School District.

TECHNICAL CERTIFICATIONS
Paraprofessionals must have the appropriate knowledge and ability to assist in instructing students and be competent in required instructional techniques and academic content areas. The ParaPro assessment is required for Delaware paraprofessional certification for candidates with less than two years of study at an institution of higher education.

Praxis Core Academic Skills for Educators
This assessment measures academic skills in reading, writing and mathematics. The assessment was designed to measure the skills and content knowledge of candidates entering teacher preparation programs. Delaware’s institutions of higher education use the Praxis Core tests to evaluate individuals for entry into teacher education programs. Delaware requires Praxis Core scores as part of their teacher licensing process.
Allied Health

SUMMARY OF MAJOR
The Allied Health program of study is a Career & Technical Education (CTE) instructional program that engages students in open-ended problem solving where they study topics such as medical terminology and human anatomy and physiology. Through exploration of the National Health Science Standards, students will acquire important skills necessary for healthcare professionals such as medical mathematics, communication, safety practices, legal responsibilities, and teamwork. In addition, students will develop technical skills such as performing a wound culture, measuring vital signs, collecting a throat culture and performing a strep test. The program prepares students for a variety of careers in healthcare such as respiratory therapist, nurse, physical therapist, dental hygienist, and medical lab technician.

COLLEGE CREDIT
Students who complete the Allied Health major receive the following credits at Delaware Technical and Community College:

Articulated Credit (Milford High School curriculum):
- HLS 100: Intro to Health Careers
- BIO 100: Medical Terminology

Dual Enrollment Credit (Delaware Tech curriculum):
- BIO 120: Anatomy & Physiology

FUTURE CAREERS
- Respiratory Therapist
- Dental Hygienist
- Nursing Assistant
- Radiologist
- Nurse
- Medical Lab Technician
- Physical Therapist

School of Health Sciences

Allied Health Major Requirements
The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Requirements:</strong></td>
<td><strong>Suggested Electives:</strong></td>
<td><strong>ALLIED HEALTH COURSE DESCRIPTIONS</strong></td>
<td><strong>ALLIED HEALTH WORK-BASED LEARNING</strong></td>
</tr>
<tr>
<td>3 Credits</td>
<td>3.5 Credit Minimum</td>
<td>Fundamentals of Health Science (FHS)</td>
<td>Bio 120: Anatomy &amp; Physiology I</td>
</tr>
<tr>
<td>Essentials of Health Careers</td>
<td></td>
<td>Credit: 1</td>
<td>AP Psychology</td>
</tr>
<tr>
<td>Bio 120: Anatomy &amp; Physiology I</td>
<td></td>
<td>ESSENTIALS OF HEALTH CAREERS</td>
<td>Spanish III</td>
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<td></td>
<td></td>
<td>Level: College Prep</td>
<td>Strength Training</td>
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<td>Prerequisite: None</td>
<td>Fitness Training</td>
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<td>This course introduces students to careers in healthcare</td>
<td>Team Sports</td>
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<td>and is a prerequisite to the other Allied Health program</td>
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<td>of study courses. This course will explore the National</td>
<td>Work-Based Learning</td>
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<td>Consortium for Health Science Education (NCHSE)</td>
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<td>Health Science Standards and entry-level healthcare</td>
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<td>skills as well as the language of medicine. Students</td>
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<td>begin preparation for the National Consortium for</td>
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<td>Health Science Education (NCHSE) National Health</td>
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<td></td>
<td>Science Assessment.</td>
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<td>Credit: 1</td>
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<tr>
<td></td>
<td></td>
<td>Prerequisite: Fundamentals of Health Science (FHS)</td>
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<td>This course offers students the opportunity to become</td>
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<td>effective and efficient healthcare providers as they</td>
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<td>develop a working knowledge of various healthcare</td>
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<td>opportunities. As students identify the various areas</td>
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<td>of Allied Health, they will discuss the potential of</td>
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<td>education, advancement, employment opportunities,</td>
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<td>employment sites, and financial rewards. Students</td>
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<td>will focus on careers in the healthcare field by applying</td>
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<td>classroom/lab knowledge and skills to clinical settings</td>
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<td>as they participate in direct or simulated patient care.</td>
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</tbody>
</table>

FUNDAMENTALS OF HEALTH SCIENCE (FHS)
Level: College Prep
Prerequisite: None
This course introduces students to careers in healthcare and is a prerequisite to the other Allied Health program of study courses. This course will explore the National Consortium for Health Science Education (NCHSE) Health Science Standards and entry-level healthcare skills as well as the language of medicine. Students begin preparation for the National Consortium for Health Science Education (NCHSE) National Health Science Assessment.

ESSENTIALS OF HEALTH CAREERS
Level: College Prep
Prerequisite: Fundamentals of Health Science (FHS)
This course offers students the opportunity to become effective and efficient healthcare providers as they develop a working knowledge of various healthcare opportunities. As students identify the various areas of Allied Health, they will discuss the potential of education, advancement, employment opportunities, employment sites, and financial rewards. Students will focus on careers in the healthcare field by applying classroom/lab knowledge and skills to clinical settings as they participate in direct or simulated patient care.

BIOL 120: ANATOMY & PHYSIOLOGY I
Level: Dual Enrollment
Prerequisite: Essentials of Health Careers and SAT 480 ERW, Accuplacer Reading 78, Writing 84, or 75% grade in Technical Reading & Writing
This course introduces students to the anatomy and physiology of humans including the structure and function of cells, tissues, and integumentary, skeletal, muscular, nervous, and endocrine systems. Coordinated laboratory experiments are an integral part of this course. Students learn the physiology of each body system, as well as how to investigate common diseases, disorders, and emerging diseases. The prevention, diagnosis, and treatment of disease are addressed.

ALLIED HEALTH WORK-BASED LEARNING
Credit: 1 or More Determined by Work Hours
Prerequisite: Completion of Major
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.
**Public and Community Health**

**SUMMARY OF MAJOR**

The **Public & Community Health** program of study is a three (3) course Career & Technical Education (CTE) instructional program that engages students in a comprehensive approach to health while learning about social determinants such as poverty, discrimination, and inadequate access to resources. Students will learn to view health from medical, behavioral, social, and environmental perspectives. Additionally, students will discover methods for eliminating health inequities and bringing awareness to public policy to determine the distribution of resources needed for healthy communities. Students will explore the fields of health and human services while investigating client needs, services, and the skills and attitudes required of the effective human services worker. Through exploration of the National Health Science Standards, students will acquire important skills necessary for healthcare professionals such as medical terminology, medical mathematics, communication, safety practices, legal responsibilities, and teamwork.

**COLLEGE CREDIT**

Students who complete the **Public & Community Health** major receive the following credits at Delaware Technical and Community College:

- Articulated Credit (Milford High School curriculum): Dual Enrollment Credit (Delaware Tech curriculum): Delaware Technical Community College: BIO100 - Medical Terminology (3 credits)

- Dual Enrollment Credit (Wilmington University): HLT321 - Personal Wellness (3 credits)

- CPR / First Aid Certification through the National Consortium for Health Science Education (NCHSE) National Health Science Assessment.

Further, this course is offered as an articulated course through Wilmington University (HLT 321- Personal Wellness). At the completion of the program of study, students complete the National Consortium for Health Science Education (NCHSE) National Health Science Assessment.

**School of Health Sciences**

**PUBLIC AND COMMUNITY HEALTH COURSE DESCRIPTIONS**

**FUNDAMENTALS OF HEALTH SCIENCES (FHS)**

**Level:** College Prep  
**Credit:** 1  
**Prerequisite:** Fundamentals of Health Sciences (FHS)  
This course offers students the opportunity to:  
- Introduce students to population health and examines the interdisciplinary approach to social and behavioral influences.  
- Students learn the history of public and community health and the multi-disciplinary approach to health, which includes examining various organizations and healthcare delivery systems.  
- Students examine complex public health problems and are exposed to major theories of disease etiology and intervention. Additionally, students explore public health issues related to epidemiology, mental health, disabilities, and substance abuse.  
- Students participate in Mental Health First Aid Certification through the National Council for Behavioral Health (NCBH) and continue preparation for the National Consortium for Health Science Education (NCHSE) National Health Science Assessment.

**ESSENTIALS OF PUBLIC & COMMUNITY HEALTH (EPCH)**

**Level:** College Prep  
**Credit:** 1  
**Prerequisite:** Fundamentals of Health Sciences (FHS)  
The **Essentials of Public & Community Health (EPCH)** course introduces students to population health and examines the interdisciplinary approach to social and behavioral influences. Students learn the history of public and community health and the multi-disciplinary approach to health, which includes examining various organizations and healthcare delivery systems. Students examine complex public health problems and are exposed to major theories of disease etiology and intervention. Additionally, students explore public health issues related to epidemiology, mental health, disabilities, and substance abuse. Students participate in Mental Health First Aid Certification through the National Council for Behavioral Health (NCBH) and continue preparation for the National Consortium for Health Science Education (NCHSE) National Health Science Assessment.

**PUBLIC AND COMMUNITY HEALTH WORK-BASED LEARNING**

**Level:** 1 or More Determined by Work Hours  
**Prerequisite:** Completion of Major  
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.
Sports & Health Sciences

A combination of three of the following courses:
1. Fundamentals of Health Science
2. Essentials of Health Careers
3. Anatomy & Physiology
4. Strength Training
5. Fitness Training
6. Team Sports

STUDENT ORGANIZATIONS
- Participate on Athletic Team
- Volunteer as Sports Manager
- Varsity Club

Students in the Sports & Health Sciences Major organize the Milford High School blood drive each year.

SUMMARY OF MAJOR
A unique combination of coursework gives students the necessary experience to major in the competitive field of sports medicine. Designed to give students a background in human anatomy, fitness, basic medical knowledge, students who complete this major will have the skills and experience to pursue a variety of college majors ranging from medicine to sports management to athletic training.

COLLEGE CREDIT
Students who complete the Sports & Health Sciences major receive the following articulated credit at Delaware Technical Community College:

BIO 100: Medical Terminology
HLS 100: Intro to Health Careers

Future Careers
- Athletic Trainer
- Athletic Director
- Physical Therapist
- Sports Marketing
- Sports Psychologist
- Fitness Marketing Specialist

School of Health Sciences

School of Health Sciences Major Requirements
The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
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<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 Credits</td>
<td>English 9 or higher</td>
<td>English 10 or higher</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 Credits</td>
<td>Algebra I or higher</td>
<td>Geometry or higher</td>
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<tr>
<td>Science</td>
<td>3 or 4 Credits</td>
<td>Physical Science or higher (Graduation Requirement)</td>
<td>Biology or higher (Graduation Requirement)</td>
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</tr>
<tr>
<td>Social Studies</td>
<td>3 or 4 Credits</td>
<td>Human Geography or AP Human Geography</td>
<td>U.S. Government &amp; Economics or AP U.S. Government &amp; Politics</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Health</td>
<td>1 Credit</td>
<td>Health/Driver’s Education</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>1 Credit</td>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>2 Credits</td>
<td>Spanish I or higher</td>
<td>Spanish II or higher</td>
</tr>
<tr>
<td>Major Requirements</td>
<td>3 Credits</td>
<td>A combination of three of the following courses:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fundamentals of Health Science, Essentials of Health Careers, Advanced PE, Strength Training, Anatomy &amp; Physiology</td>
<td></td>
</tr>
<tr>
<td>Suggested Electives</td>
<td>3.5 Credit Minimum</td>
<td>Business, Finance, &amp; Marketing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Spanish III</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- AP Psychology</td>
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<td></td>
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<td>- Strength Training</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Fitness Training</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Team Sports</td>
<td></td>
</tr>
</tbody>
</table>

Students in the Sports & Health Sciences Major organize the Milford High School blood drive each year.
### Humanities

#### COURSE SELECTIONS
A combination of three English or Social Studies courses above the requirements for graduation.

#### STUDENT ORGANIZATIONS
- Drama Club
- International Club
- Journalism
- Student Government Association
- Students in Creative Writing participate in National Novel Writing Month. These students compose and submit novels to this international competition.

#### The Young Writers Program
promotes writing fluency, creative education, and the sheer joy of novel-writing in K-12 classrooms. We provide free classroom kits, writing workbooks, Common Core-aligned curricula, and virtual class management tools to more than 2,200 educators from Dubai to Boston. www.nanowrimo.org

#### SUMMARY OF MAJOR
This major is geared toward the student who is interested in studying law, geography, economics, governmental policy, journalism, literature, writing, or philosophy at the university level. Additional courses that make up this major will have an emphasis on research and writing. Students are encouraged to enroll in Advanced Placement and/or Dual Enrollment courses in English and Social Studies.

#### COLLEGE CREDIT
Students may obtain college credit through Dual Enrollment and/or scores of 3 or higher on Advanced Placement exams.

### Future Careers
- Historian
- Professor
- Lawyer
- Paralegal
- Writer
- Researcher
- International Relations

#### Student Organizations

**Delaware Young Playwrights**
Delaware Theatre Company Students in Drama are encouraged to participate in the Young Playwrights Festival. Each student submits a script to this competition to earn scholarships and recognition. www.delawaretheatre.org/young-playwrights-festival

**Poetry Out Loud**
Students are encouraged to participate in Poetry Out Loud. Created by the National Endowment for the Arts and the Poetry Foundation, Poetry Out Loud is administered in partnership with the State Arts Agencies of all 50 states, the District of Columbia, the U.S. Virgin Islands, and Puerto Rico. One Champion is selected through the competition at Milford High School to represent the school in the Delaware competition. Winners are selected at this competition to compete in the National competition in Washington D.C. www.poetryouloud.org

#### Suggested Electives: 3.5 Credit Minimum
- Spanish III
- AP Psychology
- Spanish IV
- AP Spanish Language and Culture
- SOC 111: Sociology

### School of Modern Studies

#### Humanities Major Requirements
The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English:</strong> 4 Credits</td>
<td><strong>Mathematics:</strong> 4 Credits</td>
<td><strong>Science:</strong> 3 or 4 Credits</td>
<td><strong>Social Studies:</strong> 3 or 4 Credits</td>
</tr>
<tr>
<td>English 9 or higher</td>
<td>Algebra I or higher</td>
<td>Physical Science or higher (Graduation Requirement)</td>
<td>Human Geography or AP Human Geography</td>
</tr>
<tr>
<td>English 10 or higher</td>
<td>Geometry or higher</td>
<td>Biology or higher (Graduation Requirement)</td>
<td>U.S. Government &amp; Economics or AP U.S. Government &amp; Politics</td>
</tr>
<tr>
<td>English 11 or higher</td>
<td>Algebra II or higher</td>
<td>Choose one:</td>
<td>U.S. History or AP U.S. History</td>
</tr>
<tr>
<td>English 12 or higher</td>
<td>Choose one:</td>
<td>• AP Biology • Chemistry • AP Chemistry • Earth Science • AP Environmental Science • Physics • AP Physics</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• AP Biology • Chemistry • AP Chemistry • Earth Science • AP Environmental Science • Physics • AP Physics</td>
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<tr>
<td></td>
<td></td>
<td>• AP Human Geography • Psychology • AP Psychology • AP U.S. Government &amp; Politics • AP U.S. History • World History</td>
<td></td>
</tr>
</tbody>
</table>

#### Additional Social Studies or English Courses

**Health:** 1 Credit
- Health/Driver’s Education

**Physical Education:** 1 Credit
- Physical Education

**Spanish:** 2 Credits
- Spanish I or higher
- Spanish II or higher

**Major Requirements:** 3 Credits

**Suggested Electives:** 3.5 Credit Minimum
- Spanish III
- AP Psychology
- Spanish IV
- AP Spanish Language and Culture
- SOC 111: Sociology

Milford High School Catalog
**Spanish Major Requirements**

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: 4 Credits</td>
<td>English 9 or higher</td>
<td>English 10 or higher</td>
<td>English 11 or higher</td>
<td>English 12 or higher</td>
</tr>
<tr>
<td>Mathematics: 4 Credits</td>
<td>Algebra I or higher</td>
<td>Geometry or higher</td>
<td>Algebra II or higher</td>
<td>Choose one:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• AP Calculus AB</td>
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<td></td>
<td>• AP Statistics</td>
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<tr>
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<td></td>
<td>• MAT 153: College</td>
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<td></td>
<td>Math &amp; Statistics</td>
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<tr>
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<td>• Pre-Calculus</td>
</tr>
<tr>
<td>Science: 3 or 4 Credits</td>
<td>Physical Science or higher</td>
<td>Biology or higher</td>
<td>Choose one:</td>
<td>Choose one:</td>
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<tr>
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<td>(Graduation Requirement)</td>
<td>(Graduation Requirement)</td>
<td>• AP Biology</td>
<td>• AP Biology</td>
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<td>• Chemistry</td>
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<td>• AP Chemistry</td>
<td>• Earth Science</td>
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<td>• Earth Science</td>
<td>• AP Environmental Science</td>
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<td></td>
<td>• AP Environmental Science</td>
<td>• Physics</td>
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<td>• Physics</td>
<td>• AP Physics</td>
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<tr>
<td>Social Studies: 3 or 4 Credits</td>
<td>Human Geography or AP Human</td>
<td>U.S. Government &amp;</td>
<td>U.S. History or</td>
<td>Choose one:</td>
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<td></td>
<td>Geography</td>
<td>Economics or</td>
<td>AP U.S. History</td>
<td>• AP Biology</td>
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<td></td>
<td>AP U.S. Government &amp;</td>
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<td>• Chemistry</td>
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<td>Politics</td>
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<td>• Earth Science</td>
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<td></td>
<td>• AP Environmental Science</td>
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<td>• Physics</td>
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<td>• AP Physics</td>
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<td>• AP Human Geography</td>
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<td>• AP U.S. Government &amp; Politics</td>
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<td>• AP U.S. History</td>
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<td></td>
<td></td>
<td>• World History</td>
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<tr>
<td>Health: 1 Credit</td>
<td>Health/Driver’s Education</td>
<td>Physical Education</td>
<td></td>
<td></td>
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<tr>
<td>Spanish: 2 Credits</td>
<td>Spanish I or higher</td>
<td>Spanish II or higher</td>
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<tr>
<td>Major Requirements: 3 Credits</td>
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<td></td>
<td>Spanish III</td>
<td>Spanish IV</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>AP Spanish Language &amp; Culture</td>
</tr>
<tr>
<td>Suggested Electives: 3.5 Credit</td>
<td>Spanish Majors should consider</td>
<td></td>
<td></td>
<td>AP Psychology</td>
</tr>
<tr>
<td>Minimum</td>
<td>secondary major courses such as</td>
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<td></td>
<td>SOC 111: Sociology</td>
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<tr>
<td></td>
<td>Allied Health or Teacher Academy</td>
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</table>

**SUMMARY OF MAJOR**

This major is for students who value the skill of learning another language and plan to travel abroad or use Spanish in our own community to further their college or career plans. Students will have the opportunity to gain a high level of proficiency in Spanish which they can apply at any career or use to enter high level coursework in college.

**COLLEGE CREDIT**

Students may obtain college credit through Dual Enrollment and/or scores of 3 or higher on Advanced Placement exams.
SUMMARY OF MAJOR
Career & Technical Education (CTE) instructional program of study requires students to apply the skills and tools of digital designers used in graphic design, pixel-based imagery manipulation, HTML coding, digital video production, vector image manipulation, digital illustration, and digital publishing. Students utilize strategies to solve open-ended problems while learning how to apply technical skills, creative skills, industry knowledge, documentation techniques, and processes using modern, industry-leading technology and software. Client-based learning experiences and industry-mentored projects introduce students to a wide array of related careers in public relations, marketing, web and digital communications and printing.

DIGITAL DESIGN TECHNOLOGY COURSE DESCRIPTIONS

**FOUNDATIONS OF DIGITAL DESIGN (FDD)**
Level: College Prep  Credit: 1
Prerequisite: None
This course introduces students to the foundational principles, techniques, and skills of visual communications. Students learn the elements and principles of design, color theory, typography, packaging/promotional design, copyright/first use, and image manipulation techniques along with the communication skills required to work within the media industry and client-based realworld. Students begin to develop the capstone cumulative professional portfolio.

**PROCESSES OF DIGITAL PRODUCTION (PDP)**
Level: College Prep  Credit: 1
Prerequisite: Foundations of Digital Design (FDD)
This course engages students in the use of the computer as an illustrative medium and film as an influential medium. Through the use of Adobe Illustrator and video production software, students prepare work in digital video production, video editing, and broadcasting of digital videos. Students are prepared in Adobe Illustrator with a focus on vector image manipulation, editing, illustration, publishing, and the delivery of digital products. Capstone skills learned from prior coursework are applied for students to develop client-based design work through district and community partnerships to with the completion of the capstone cumulative portfolio professional portfolio.

**APPLICATIONS OF DIGITAL DESIGN (ADD)**
Level: College Prep  Credit: 1
Prerequisite: Processes of Digital Production (PDP)
This course engages students in the use of the computer as an illustrative medium and film as an influential medium. Through the use of Adobe Photoshop, Students learn raster image manipulation, editing, software application, publishing, digital media literacy, HTML coding, web development, and the delivery of digital products. Using the software, students will see their original design concepts and brainstorming come to actualization in the digital world. Students continue to develop the capstone cumulative portfolio through production of their media and design concepts.

**COMMUNICATION TECHNOLOGY IV**
Level: College Prep  Credit: 1 (Elective)
Prerequisite: Teacher Approval
Students are expected to complete a multimedia project that has a high degree of complexity. This project can be used as an entry to various state and national competitions. Participation in TSA, the student organization, is required.

**DIGITAL DESIGN TECHNOLOGY WORK-BASED LEARNING**
Prerequisite: Completion of Major  Credit: 1 or More Determined by Work Hours
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.
**Performing Arts**

**SUMMARY OF MAJOR**

The performing arts major is designed for students interested in pursuing a career in music and performance. Students may choose from a series of courses including band, choir, music theory, and drama. Students may elect to concentrate in one of these areas or take a unique combination customized to their interest. Instrumental and choral students rehearse daily in class in preparation for musical performances throughout the year both in school and within the community. Students in this major are required to participate in the Kelly Tyrrell Gill Night of the Arts as well as various other performances.

**BUCCANEER MARCHING BAND**

The marching band begins in August each year during band camp. They perform at sporting events and marches in local parades. Marching band practices during the school day.

**DELaware ALL-STATE ENSEMBLES**

Ensembles include state junior and senior concert bands, junior and senior choirs, jazz ensemble, orchestra, and honors guitar. There is also a yearly composition competition for budding young composers. Diligent preparation is a must for the audition requirements including scales, prepared pieces, and sight reading, as well as submission of original works for composers. All State auditions run November through February, depending on the ensemble. Those selected to these elite ensembles rehearse with guest conductors from across the country in preparation for concerts.

**Kelly Tyrrell Gill Night of the Arts**

Twice a year students enrolled in music and art courses showcase their talents during an evening presentation. These nights are an opportunity for students to present their culminating work in 2D and 3D art as well as choir and band performances.

**Future Careers**

- Actor
- Musician
- Singer
- Music Teacher
- Composer

**School of Art & Design**

**Performing Arts Major Requirements**

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>COURSE CATEGORY</th>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
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</thead>
<tbody>
<tr>
<td>English: 4 Credits</td>
<td>English 9 or higher</td>
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<td>English 12 or higher</td>
</tr>
<tr>
<td>Mathematics: 4 Credits</td>
<td>Algebra I or higher</td>
<td>Geometry or higher</td>
<td>Algebra II or higher</td>
<td>Choose one: AP Calculus AB, AP Statistics, MAT 153: College Math &amp; Statistics, Pre-Calculus</td>
</tr>
<tr>
<td>Science: 3 or 4 Credits</td>
<td>Physical Science or higher (Graduation Requirement)</td>
<td>Biology or higher (Graduation Requirement)</td>
<td>Choose one: AP Biology, AP Chemistry, AP Environmental Science, AP Physics, AP Psychology, AP U.S. Government &amp; Politics, AP U.S. History, AP World History</td>
<td></td>
</tr>
<tr>
<td>Social Studies: 3 or 4 Credits</td>
<td>Human Geography or AP Human Geography</td>
<td>U.S. Government or AP U.S. Government &amp; Politics</td>
<td>U.S. History or AP U.S. History</td>
<td></td>
</tr>
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<tr>
<td>Physical Education: 1 Credit</td>
<td>Physical Education</td>
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<td></td>
</tr>
<tr>
<td>Spanish: 2 Credits</td>
<td>Spanish I or higher</td>
<td>Spanish II or higher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Requirements: 3 Credits</td>
<td>A combination of three performing arts courses including band, choir, and drama.</td>
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</tr>
<tr>
<td>Suggested Electives: 3.5 Credit Minimum</td>
<td>Spanish III, Spanish IV AP Spanish Language &amp; Culture</td>
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</tr>
</tbody>
</table>
Visual Arts Major Requirements
The following is a suggested sequence of courses required to successfully complete this major.

**COURSE SELECTION**
A combination of three visual arts courses including art, digital design technology, and yearbook.

**STUDENT ORGANIZATIONS**
- Art Club
- Kelly Tyrrell Gill Night of the Arts

*Summary of Major*
This program of study allows students to explore a variety of 2D and 3D art media while focusing on the elements of art and principles of design. Students will study art works and genres in the context of culture and history. Students will be encouraged to develop a portfolio over the course of this major for application to art and design schools. Critical thinking skills will be used during art creation, research, critiques and discussion. Students will create, discuss and write about art works. Students are highly encouraged to participate in Art Club and submit work for the Kelly Tyrrell Gill Night of the Arts as well as local, state regional, and national art contests and art exhibitions.

**Future Careers**
- Art Educator
- Potter
- Painter
- Artist
- Curator
- Sculptor

**School of Art & Design**

**Visual Arts Major Requirements**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADE 9</th>
<th>GRADE 10</th>
<th>GRADE 11</th>
<th>GRADE 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>English: 4 Credits</td>
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<tr>
<td>Mathematics: 4 Credits</td>
<td>Algebra I or higher</td>
<td>Geometry or higher</td>
<td>Algebra II or higher</td>
<td>Choose one: AP Calculus AB, AP Statistics, MAT 153: College Math &amp; Statistics, Pre-Calculus</td>
</tr>
<tr>
<td>Science: 3 or 4 Credits</td>
<td>Physical Science or higher (Graduation Requirement)</td>
<td>Biology or higher (Graduation Requirement)</td>
<td>Choose one: AP Biology, Chemistry, AP Chemistry, Earth Science, AP Environmental Science, Physics, AP Physics</td>
<td></td>
</tr>
<tr>
<td>Social Studies: 3 or 4 Credits</td>
<td>Human Geography or AP Human Geography</td>
<td>U.S. Government &amp; Economics or AP U.S. Government &amp; Politics</td>
<td>U.S. History or AP U.S. History</td>
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</tr>
<tr>
<td>Health: 1 Credit</td>
<td>Health/Driver's Education</td>
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</tr>
<tr>
<td>Physical Education: 1 Credit</td>
<td>Physical Education</td>
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</tr>
<tr>
<td>Spanish: 2 Credits</td>
<td>Spanish I or higher</td>
<td>Spanish II or higher</td>
<td></td>
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</tr>
<tr>
<td>Major Requirements: 3 Credits</td>
<td>A combination of three visual arts courses including art, digital design technology, and yearbook.</td>
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<td></td>
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</tr>
<tr>
<td>Suggested Electives: 3.5 Credit Minimum</td>
<td>Visual Arts majors should consider secondary major courses such as Digital Design Technology, or Marketing to compliment this major.</td>
<td>Spanish III</td>
<td>Spanish IV AP Spanish Language &amp; Culture</td>
<td></td>
</tr>
</tbody>
</table>
Technology Student Association

TSA is a national organization of students whose purpose is to take the study of STEM beyond the classroom. TSA gives students the chance to pursue academic challenges among friends with similar goals and interests. Each year students compete in state-wide competitions in areas such as website design, 3D modeling, and radio controlled operation.

Student Organizations

TSA

Summary of Major

This major allows students to focus on the conceptual ideas of computing to understand why certain tools or languages might be utilized to solve particular problems. Topics such as interface design, limits of computers, and societal and ethical issues are explored. Students are exposed to problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing.

College Credit

Students who complete the Computer Science major earn articulated credit from the following College/Universities.

Delaware Technical Community College

CIS 120: Introduction to Program

Delaware State University

CSCI 110: Computational Thinking I

CSCI 120: Elements of Computer Programming I

Wilmington University

SEC100: Introduction to Computer Hardware and Operation

SEC 290: Introduction to Programming with Python

Computer Science Elective

University of Delaware

CISC101: Principles of Computing

This major includes two Advanced Placement courses and the potential for at least six (6) college credits.

Future Careers

- Computer Scientist
- Network Specialist
- Software Application Designer
- Systems Engineer
- Web Developer
- Database Administrator

Course Sequence

Exploring Computer Science

AP Computer Science Principles (CSP)

AP Computer Science A

Student Organizations

TSA

Computer Science Major Requirements

The following is a suggested sequence of courses required to successfully complete this major.

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploring</td>
<td>AP Computer Science</td>
<td>AP Computer</td>
<td>Spanish III</td>
</tr>
<tr>
<td>Computer</td>
<td>Science Principles (CSP)</td>
<td>Science A</td>
<td>Web Page Design</td>
</tr>
<tr>
<td>3 credits</td>
<td></td>
<td></td>
<td>and Publishing</td>
</tr>
<tr>
<td>AP Computer</td>
<td></td>
<td></td>
<td>Spanish IV</td>
</tr>
<tr>
<td>Science A</td>
<td></td>
<td></td>
<td>AP Spanish Language</td>
</tr>
<tr>
<td>Level: Advanced</td>
<td>Prerequisite: College Prep</td>
<td>Prerequisite:</td>
<td>&amp; Culture</td>
</tr>
<tr>
<td>Placement</td>
<td>None</td>
<td>AP Computer</td>
<td></td>
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<tr>
<td>Credit: 1</td>
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<td>Science Principles</td>
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Computer Science Course Descriptions

Exploring Computer Science

Level: College Prep

Prerequisite: None

This course allows students to focus on the conceptual ideas of computing to understand why certain tools or languages might be utilized to solve particular problems. The goal of the course is to develop computational practices of algorithm development, problem solving and programming within the context of relevant and authentic problems. Topics such as interface design, limits of computers, and societal and ethical issues are explored.

AP Computer Science A

Level: Advanced Placement

Prerequisite: AP Computer Science Principles

This course allows students to focus on the conceptual ideas of computing to understand why certain tools or languages might be utilized to solve particular problems. The course emphasizes both object-oriented and imperative problem solving and design. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems.

AP Computer Science Principles (CSP)

Level: Advanced Placement

Prerequisite: None

This course allows students to understand the real-world impact of computing applications and programming literacy using a multidisciplinary approach. Students are introduced to creative aspects of programming using abstractions and algorithms, working with large data sets, understandings of the internet and issues of cybersecurity, and impacts of computing that affect different populations. CSP gives students the opportunity to use current technologies to solve problems and create meaningful computational artifacts.

AP Computer Science A

Level: Advanced Placement

Prerequisite: AP Computer Science Principles

The AP Computer Science A course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design.

Computer Science Work-Based Learning

Credit: 1 or More Determined by Work Hours

Prerequisite: Completion of Major

Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.
**Creative Performance.**

Spontaneous problem solving, and such as balsa wood structure, compete in teams at an annual potential. Students who participate recognize and explore their true friendships, and are able to develop life skills, create new ideas to come to life in an exciting, productive environment.

Participants build self-confidence, engaging students in their learning by allowing their knowledge and ideas to come to life in an exciting, productive environment. Participants build self-confidence, develop life skills, create new friendships, and are able to recognize and explore their true potential. Students who participate compete in teams at an annual regional competition in activities such as balsa wood structure, spontaneous problem solving, and creative performance.

**SUMMARY OF MAJOR**

This major is designed to expose students to high levels of math and a broad base of scientific principles. This content will be applied to practical situations asking students to solve engineering problems in the real world. Students majoring in Pre-Engineering should be prepared to advance to Calculus or Precalculus by senior year. This major can be customized to fit the area of interest of the student. Environmental, Civil, Aeronautical and Biomedical are all areas students in this major can explore. This major prepares students to attend a four year university to study Engineering.

**FUTURE CAREERS**

- Mechanical Engineer
- Civil Engineer
- City Planner
- Environmental Scientist
- Electrical Engineer
- Biomedical Engineer
- Architect

**ENGINEERING COURSE DESCRIPTIONS**

**PRINCIPLES OF ENGINEERING (POE)**

Level: College Prep
Prerequisite: None
Principles of Engineering (POE) allows students to explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

**ENGINEERING WORK-BASED LEARNING**

Credit: 1 or More Determined by Work Hours
Prerequisite: Completion of Major
Work-Based learning provides students an early career experience. Upon completion of the major, students are able to secure a job or internship experience and earn high school credit while working. A work-based learning student leaves school early to go to work or internship and puts the skills learned from their major to use. Students are supported by a work-based learning coordinator and must complete specific assignments. Students earn a grade and credits while gaining real-life experience on the job. The job or internship must directly relate to the major of study.

**ENGINEERING DESIGN & DEVELOPMENT (EDD)**

Level: College Prep
Prerequisite: None
Engineering Design and Development (EDD)* is the capstone course for PLTW Engineering and requires students to identify an issue and then research, design, and test a solution – ultimately presenting their solution to a panel of engineers and professionals throughout the lifecycle of product development. Students apply the professional skills they have developed to document a design process to standards. Completing EDD helps students prepare for and accelerate in a post-secondary program or career.
Academic Course Descriptions

ENGLISH 9 Level: College Prep Credit: 1
Prerequisite: None

ENGLISH 9 is aligned to Common Core State Standards, the ninth grade curriculum offers an in-depth introduction to high school writing expectations and an intense survey of specific literary types. Students will learn to gather evidence from texts and incorporate it in written and oral responses. There is a focus on the writing process, including argumentative, informative, and narrative pieces as well as vocabulary development. Works by Harper Lee, Edgar Allan Poe, William Wordsworth, and William Shakespeare, as well as informational and historical articles are some of the texts covered over the course of the year.

HONORS ENGLISH 9

Level: Pre-AP Credit: 1 (Weighted)
Prerequisite: Minimum grade of C in Honors English 8 or Qualifying Score & Summer Reading Assignment Required

ENGLISH 10

Level: College Prep Credit: 1
Prerequisite: English 9

This course includes a study of American literature from the Puritans and early settlers up to modern times. Students learn historical background by reading, discussing, and writing critically about representative short stories, novels, poetry, essays, and drama. Independent readings and a research paper using MLA formatting are required.

ENGLISH 11

Level: College Prep Credit: 1
Prerequisite: English 10

This course prepares college bound students for the types of writing they will need for success after high school: letters, essays, and literary analyses. The course also develops critical reading skills. Writing instruction emphasizes clarity, aptness and smoothness of expression. Students study traditional selections of British literature and complete independent readings. The goal of this class is to help the student use revision strategies independently and to develop critical thinking skills. Students are required to complete a research paper using MLA format.

AP ENGLISH LANGUAGE AND COMPOSITION

Level: Advanced Placement Credit: 1 (Weighted)
Prerequisite: Summer Reading and Written Response

This course prepares students for success on the AP English Language and Composition Exam. It enhances the ability of the student to become a skilled reader of various types of prose and to become a skilled writer who composes for a variety of purposes. The focus of the course is an intensive use of the writing process. In addition, there is a close examination of textual material to strengthen reading comprehension. Students taking this course are required to take the AP Language and Composition Exam.

AP ENGLISH LITERATURE AND COMPOSITION

Level: Advanced Placement Credit: 1 (Weighted)
Prerequisite: Summer Reading and Written Response

This is an intensive study of the methods and techniques writers use to create valid arguments, often while synthesizing information from multiple sources. Students will read a variety of genres, write and revise essays modeled on different modes of analysis, work to improve the breadth and depth of vocabulary, and prepare for the AP Literature and Composition Exam.

ENG 101: CRITICAL THINKING & WRITING

ENG 102: COMPOSITION & RESEARCH

Level: College Prep Credit: 1
Prerequisite: English 11

This course is designed to teach the concepts of critical thinking and reading skills in the context of written response and essay writing. This course introduces and reinforces the skills necessary to complete the academic essays and to respond to diverse texts in meaningful ways.

HONORS ENGLISH 11

Level: Pre-AP Credit: 1 (Weighted)
Prerequisite: None

This course includes a study of American literature from the Puritans and early settlers up to modern times. Students learn historical background by reading, discussing, and writing critically about representative short stories, novels, poetry, essays, and drama. Independent readings and a research paper using MLA formatting are required.

CREATIVE WRITING

Level: College Prep Credit: 1
Prerequisite: None

Students will intensively explore the fundamental aspects of constructing and critiquing creative writing in a variety of forms. Students will write a variety of creative pieces. Students will be expected to write daily.

SAT CRITICAL READING AND WRITING PREP

Level: College Prep Credit: 1
Prerequisite: None

This course helps students prepare for the Evidence Based Reading and Writing portion of the SAT test. Students will examine test-taking strategies, take sample tests, and practice ways to improve reading skills.

FILM ANALYSIS

Level: College Prep Credit: 1
Prerequisite: None

In this course, students will compare and contrast films with their literary geneses. Students will first independently read a narrative work and then analyze the cinematic version. Students will also learn the elements of film and how movies are made. Students will be expected to read and write daily.

YEARBOOK I, II, III, IV

Level: College Prep Credit: 1
Prerequisite: None

This course is designed to instruct students in the various tasks that go into producing a yearbook by providing a hands-on experience. Students will write copy, design layouts, take photographs, crop photographs, and sell ads. The remainder of the course requires students to use these skills to finalize the Milfordian for the coming year.

ALGEBRA I

Level: College Prep Credit: 1
Prerequisite: None

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. The critical focus of the course is to deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using linear, exponential, and quadratic functions. Additional topics within data analysis and statistics will be explored. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

HONORS ALGEBRA I

Level: Pre-AP Credit: 1 (Weighted)
Prerequisite: None

This course is designed to accelerate students into the honors math program in high school. Students completing this course will be on track to taking Calculus, Statistics, or MAT 153 their senior year. Students in this course should take Honors Geometry in the same school year. The critical focus of the course is to deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using linear, exponential, and quadratic functions.

GEOMETRY

Level: College Prep Credit: 1
Prerequisite: Algebra I

Students explore complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Important geometric ideas are explored and formalized including transformations, congruency, similarity, and right triangle trigonometry. The Mathematical Practice Standards apply throughout the course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

MATH ELECTIVES

ENG 102: COMPOSITION & RESEARCH

Level: College Prep Credit: 1
Prerequisite: English 11

This college-level course is designed to teach the concepts of critical thinking and reading skills in the context of written response and essay writing. This course introduces and reinforces the skills necessary to complete the academic essays and to respond to diverse texts in meaningful ways.

HONORS GEOMETRY

Level: Pre-AP Credit: 1 (Weighted)
Prerequisite: Minimum grade of C in Honors Algebra I or Qualifying Score

This course is designed to instruct students in the various tasks that go into producing a yearbook by providing a hands-on experience. Students will write copy, design layouts, take photographs, crop photographs, and sell ads. The remainder of the course requires students to use these skills to finalize the Milfordian for the coming year.

This course is designed to instruct students in the various tasks that go into producing a yearbook by providing a hands-on experience. Students will write copy, design layouts, take photographs, crop photographs, and sell ads. The remainder of the course requires students to use these skills to finalize the Milfordian for the coming year.

This course is designed to instruct students in the various tasks that go into producing a yearbook by providing a hands-on experience. Students will write copy, design layouts, take photographs, crop photographs, and sell ads. The remainder of the course requires students to use these skills to finalize the Milfordian for the coming year.
ALGEBRA II
Level: College Prep
Pre-requisite: Geometry
Credit: 1
Building on their work with linear, quadratic, and exponential functions from Algebra 1, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Additional topics within statistics and probability may be explored. The Mathematical Practice Standards apply throughout each course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

HONORS ALGEBRA II
Level: Pre-AP
Pre-requisite: Minimum grade of C in Honors Geometry or Qualifying Score
Credit: 1 (Weighted)
Building on their work with linear, quadratic, and exponential functions from Algebra 1, students extend their repertoire of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Additional topics within statistics and probability may be explored. The Mathematical Practice Standards apply throughout each course and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

RE-CALCULUS
Level: College Prep
Pre-requisite: Algebra II
Credit: 1
This course is a higher-level academic course designed to prepare students for college calculus by giving them a comprehensive knowledge of functions. Topics include exponential and trigonometric functions, inverse functions, graphing, and sequences and series.

HONORS PRE-CALCULUS
Level: Pre-AP
Pre-requisite: Minimum grade of C in Honors Algebra II or Qualifying Score
Credit: 1 (Weighted)
Honors Pre-Calculus is a rigorous, fast-paced course designed for AP Calculus AB in their senior year. Topics include all those covered in a College Prep Pre-Calculus course along with an introduction to the limit concept in Calculus. This course is designed for those students who are highly motivated and intend to enroll in AP Calculus AB the following year.

CALCULUS
Level: College Prep
Pre-requisite: Pre-Calculus
Credit: 1
This course provides an introduction to the limit concept as well as basic differentiation and integration. Trigonometric functions are also an integral part of the course.

AP CALCULUS AB
Level: Advanced Placement
Pre-requisite: Minimum grade of a C in Honors Pre-Calculus
Credit: 1 (Weighted)
This course is designed to prepare students for the Advanced Placement Calculus exam in May. This course begins with an introduction to the limit concept and continues with basic differentiation and integration. Functions will be analyzed numerically, algebraically, and graphically, utilizing the graphing calculator as an essential tool in the analysis. Trigonometric functions, as well as real-world applications, are an integral part of this course.

AP STATISTICS
Level: Advanced Placement
Pre-requisite: Minimum grade of a C in Pre-Calculus (CP or Honors)
Credit: 1 (Weighted)
This course is an intensive and rigorous statistics course in which students are introduced to the major concepts and tools 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.

MAT 120: CONTEMPORARY MATHEMATICS
Level: Delaware Tech Advanced Standing
Pre-requisite: None
Credit: 1 (Weighted)
This course will focus on providing a foundation for subsequent science courses by providing students with fundamental concept knowledge from chemistry and physics. It will present students with experience in chemical reactions, structures and properties of matter, forces and interactions, energy, waves, and electromagnetic radiation. Engineering practices have been integrated into this curriculum, as well as a focus on scientific practices to help students prepare for more expanded studies as students progress through additional science courses.

HONORS PHYSICAL SCIENCE - INTEGRATED
Level: Pre-AP
Pre-requisite: None
Credit: 1 (Weighted)
This course will focus on providing a foundation for subsequent science courses by providing students with fundamental concept knowledge from chemistry and physics. It will present students with experience in chemical reactions, structures and properties of matter, forces and interactions, energy, waves, and electromagnetic radiation. Engineering practices have been integrated into this curriculum, as well as a focus on scientific practices to help students prepare for more expanded studies as students progress through additional science courses.

BIOLOGY
Level: College Prep
Pre-requisite: None
Credit: 1
This course will investigate the fundamental concepts of modern chemical laws and theories. These concepts will be established by gathering evidence from both classroom activities and from performing classical and modern laboratory investigations. Some topics include graphing, using laboratory instruments, chemical reactions and the equations that describe them, properties of gases, models of the atom, energy in chemical reactions, basic chemistry of life, and the environment.

CHEMISTRY
Level: Pre-AP
Pre-requisite: Minimum grade of C in Honors Biology or Qualifying Score
Credit: 1 (Weighted)
Students study the basic concepts of modern chemistry covered in the academic chemistry course but at a faster pace and in greater depth in the study of each concept. These concepts will be developed through hands-on activities and laboratory experiments, mathematics, problem solving, and discussions of theory. The course is recommended as the second laboratory science in the honors sequence after Honors Biology. It meets the chemistry prerequisite for AP Chemistry and AP Biology. Students who are good mathematic problem-solvers and interested in science, engineering, or medicine as possible careers are successful in this course.

AP CHEMISTRY
Level: Advanced Placement
Pre-requisite: Completion of the Summer Assignment
Credit: 1 (Weighted)
This class is held at a college level covering the topics in a typical freshman college chemistry course. This course is designed to prepare students for the advanced placement test and earn up to eight credit hours. Topics in lecture and laboratory include molecular models, atomic structure, subatomic particles, valence electrons, Lewis structures, acids, bases, chemical thermodynamics, nuclear chemistry, electrochemistry, environmental chemistry and organic chemistry.
## SCIENCE CONTINUED

### CHM 111: INTRODUCTION TO CHEMISTRY
- **Level:** Dual Enrollment
- **Prerequisites:** None

This course provides an overview of chemical concepts through exploration of the atomic structure of matter. It is designed for students who intend to take a chemistry course in college. Topics include the periodic table, periodic trends, chemical bonding, and stoichiometry. This course is recommended for students who have completed a year of high school chemistry.

### AP ENVIRONMENTAL SCIENCE
- **Level:** Advanced Placement
- **Prerequisites:** Credit: 1 (Weighted)

AP Environmental Science is designed to be an equivalent of an introductory university course in environmental science. It is an interesting, complex, and applicable science that is constantly changing and expanding. Environmental issues are in the news every day, and it is more important than ever to understand the science behind the stories. The course will stress scientific principles, processes and analysis, while also providing opportunities to explore the many social, political, economic and ethical issues that are relevant to the environmental topics studied. In both breadth and level of detail, the content of the course reflects what is found in many introductory college courses in environmental science. All students are expected to take the AP Examination in Environmental Science upon completion of the course.

### BIO 120: ANATOMY & PHYSIOLOGY I
- **Level:** Dual Enrollment
- **Prerequisites:** AP Physics 1

This course provides an in-depth look at anatomy at the cellular level. There is extensive examination of the anatomy and physiology of the systems of the human body. In-depth dissection is required, as well as research projects and oral presentations. Autopsies and emergency room scenes are viewed.

### Social Studies

#### Grade 9 World History and Geography
- **Level:** College Prep
- **Prerequisites:** None

This course will examine chronological eras of historical world events through the lens of human geography. Starting in the Middle Ages and ending with the onset of dawn of the Industrial Age, students will explore historical continuity and change, and link past events to modern times and current events. Students will develop the skills to compare and contrast events, analyze primary and secondary sources, interpret historical documents, and gain a deeper understanding of the complex/diverse world around them. Throughout the course students will apply themes of geography to historical time periods. The different areas of focus include human interaction with the world, how things like disease and information spreads through out the world, and different regions of the world and geographic factors that help cities and towns become successful.

#### U.S. HISTORY
- **Level:** College Prep
- **Prerequisites:** None

This course begins at the reconstruction of the Civil War. It explores the political, social and economic development of our country as it builds to a world power in the late 1800’s, crashes in a Great Depression of the 1930’s, rises to a world police post- World War II, struggles internally within a Civil Rights movement, and fights the Cold War of communism. Students will utilize different methods that historians use to interpret the past including varying points of view and historical context.

#### U.S. GOVERNMENT & ECONOMICS
- **Level:** College Prep
- **Prerequisites:** None

The Civics curriculum focuses on the history and foundation of the American Government, the American Constitution, the Legislative, Executive, and Judicial branches of government, the policy system, state and local government, and citizenship. The course traces colonial history as cause and effect to the Founders’ choices in creation of government. Units of study analyze the Constitution in application to the Founders’ choices in creation of government. Units of study analyze the Constitution in application to the Founders’ choices in creation of government. This course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, and figures that influence U.S. political reality. While there is no single approach that an AP Government & Politics: United States course must follow, certain topics are generally covered in college courses.

### AP HUMAN GEOGRAPHY
- **Level:** Advanced Placement
- **Prerequisites:** None

The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students examine the spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use to understand and practice. The particular topics studied in an AP Human Geography course should be judged in light of the following five college-level goals that build on the National Geography Standards developed in 1994 and revised in 2012. On successful completion of the course, the student should be able to interpret maps and analyze geospatial data, understand and explain the implications of associations and networks among phenomena in places, recognize and interpret the relationships among patterns and processes at different scales of analysis, define regions and evaluate the regionalization process and characterize and analyze changing interconnections among places.

#### AP U.S. GOVERNMENT & POLITICS
- **Level:** Advanced Placement
- **Prerequisites:** None

The AP program in United States History is designed to provide students with the analytical skills and understanding necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses. The program enables them equivalent to those made by full-year introductory college courses. Students will learn to assess historical materials—their relevance to a given interpretive problem, their reliability, and their importance—and to weigh the evidence and interpretations presented in historical scholarship. This course will develop the skills necessary to arrive at conclusions on the basis of evidence and to interpret evidence clearly and persuasively in an essay format.

### AP POLITICAL SCIENCE
- **Level:** Advanced Placement
- **Prerequisites:** None

This course provides an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, and figures that influence U.S. political reality. While there is no single approach that an AP Government & Politics: United States course must follow, certain topics are generally covered in college courses.

### AP PSYCHOLOGY
- **Level:** Advanced Placement
- **Prerequisites:** None

This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

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**Milford High School Catalog**

**Academic Course Descriptions**
AP European History
Level: Advanced Placement
Prerequisite: None
The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Without this knowledge, we would lack the context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. In addition to providing a basic narrative of events and movements, the goals of the AP program in European History are to develop (a) an understanding of some of the principal themes in modern European History, (b) an ability to analyze historical evidence and historical interpretation, and (c) an ability to express historical understanding in writing.

Social Studies Electives

World History
Level: College Prep
Prerequisite: None
This course will examine chronological eras of historical world events beginning in the Middle Ages and ending with the onset of WWI, students will explore historical continuity and change, and link past events to their contemporary significance and current events. Students will develop the skills to compare and contrast events, analyze primary and secondary sources, interpret historical documents, and gain a deeper understanding of the complex/diverse world around them. Throughout the course students will apply themes of geography to historical time periods.

ConFLicts in World History
Level: College Prep
Prerequisite: None
This course will highlight a conflict in American History that changed the political, social and cultural values of American society. This course will focus entirely on that the specified theme contextually in history. The historical theme will vary in form but may include Era of Korea/Vietnam, Civil Rights Movement, Struggle of Women for Women’s Rights, Generation, or American Conflict in the Middle East.

Soc 111: Sociology (Online)
Level: Dual Enrollment
Credit: 1 MHS & 3 DTCC
Prerequisite: SAT 480 ERW, Accuplacer Reading 78, Writing 64, or 750 on SAT Reading & Writing
This course provides an analysis of American social organization and culture, through a cross-cultural perspective. Sociology investigates, describes, and analyzes patterns of human behavior in all areas of human experience for the purpose of understanding the human condition.

Psychology
Level: College Prep
Prerequisite: None (Seniors Only)
This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

CRI 101: Survey of Criminal Justice
Level: Dual Enrollment (Wilmington University)
Credit: 1 MHS & 3 Wilm U
This course is a survey of agencies and processes involved in the administration of criminal justice. The survey reviews the functions of the legislature, police, prosecutor, courts, and the correctional system. Problems of law enforcement in a democratic society are discussed. This course ties together all components of criminal justice and includes issues of both the juvenile and adult offender. Register on blackboard in advance.

Spanish

Spanish I
Level: College Prep
Prerequisite: None
This is an introductory course, which acquaints the student with basic vocabulary and structure of spoken and written Spanish. Reading, pronunciation, speaking, and aural comprehension are emphasized. Customs and other cultural aspects of Spanish-speaking countries are examined.

Spanish II
Level: College Prep
Prerequisite: Spanish I
In Spanish II, vocabulary and grammatical forms are developed through elementary reading material and related writings. A deeper investigation of the communicative aspects of Spanish-speaking countries is a vital part of this course. Practical, real-life situations are studied by the students and used to learn the language through the use of scenarios and compositions.

Spanish III
Level: College Prep
Prerequisite: Spanish II
In Spanish III, vocabulary and grammatical forms are developed through reading and discussion of more comprehensive material. Oral and written communication are emphasized through writing assignments, vocabulary lists, and class-paced grammar review. The study of civilization and of culture is expanded. All instruction is held primarily in Spanish.

Spanish IV
Level: College Prep
Prerequisite: Spanish III
In Spanish IV, the main emphasis is to further language abilities through conversation, composition, and study of Spanish literary works in the original language. The content of the course is supplemented with a continued study of grammatical forms. Writing style is improved through prepared as well as spontaneous themes. Students study Spanish and Latin American history, customs, and life styles to increase appreciation of the Spanish culture. All work is conducted in Spanish.

AP Spanish Language & Culture
Level: Advanced Placement
Prerequisite: Minimum grade of C in Spanish IV or the Option to Test in
In the AP Spanish Language course the covered equivalent of one college course in advanced Spanish Composition and Conversation. This course emphasizes oral communication, composition and grammer. All activities are designed to develop the goals of the AP program in a foreign language.

Performing Arts

Band
Level: College Prep
Prerequisite: At least 3 years training (or equivalent) on a windwood, brass, or percussion instrument
This course is designed to expose students to a diversit of musical styles through a variety of performance venues. During the first semester, students will participate in the marching and concert bands. Performances include all football games, annual Christmas concert, various parades and community performances. All performances as well as summer band camp are mandatory. The second semester focuses on concert band and ensemble playing, leading toward a spring concert and performance for the spring band trip. All students are required to do individual practice or private lessons on their own. Advanced students are eligible to audition for the Delaware All-State Band.

Jazz Band
Level: College Prep
Prerequisite: Audition and at least 3 Years (or Equivalent) on Training on a Brass, Woodwind or Percussion Instrument
This course focuses on performance of instrumental jazz literature. This course will help students evaluate, appreciate, and perform jazz music as an original American art form. Instrumentation is limited to select rhythm, brass, and woodwind instruments. Members must audition to be a part of the ensemble. This ensemble will perform regularly throughout the community during the school year.

Band Front
Length: Semester (Fall Only)
Prerequisite: Audition
This class is for students who wish to offer a visual presentation of music performed by the marching band. Students interested in the squad must audition in the spring. Students learn basic field/marching technique, as well as fundamental routines. Performances include all football games and various parades. Students are expected to attend scheduled practices throughout the summer, as well as band camp. Band front members are required to attend rehearsals and performances throughout the marching season. Since this is a performance-based class, students who play a band instrument are required to rehearse with the concert band following the marching season.

AP Spanish Literature & Culture
Level: Advanced Placement
Prerequisite: None
This course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Concert Choir
Level: College Prep
Prerequisite: None
Concert Choir is a vocal performance class focusing on the techniques of singing, music reading and group performance. Students will study and perform diverse styles of music from several music history periods. Regular attendance and active participation during rehearsals and performances is mandatory. Performances include various school and community functions, as well as the Winter & Spring Night of the Arts. Advanced participants are eligible to audition for the Delaware All-State Choir.

Chamber Choir
Level: College Prep
Prerequisite: None
Chamber Choir is an advanced level choir for singers who have a strong choral background. Interested students must be in the MHS Concert Choir for at least one entire school year to be considered for this ensemble. Open to grades 10, 11, 12 only with audition.

Music Literacy I
Level: College Prep
Prerequisite: None
This entry-level course focuses on the basics of learning to read and perform musical scores. Students are introduced to notation, language and terminology unique to the discipline of music. Emphasis is given to visual and aural recognition as well as performing skills. Application of skills will be performed on key-boards. This class is a prerequisite for Music Theory.

Music Literacy II
Level: College Prep
Prerequisite: Music Literacy I
This intermediate-level course builds upon Music Literacy I concepts (notation, language and terminology, visual and aural recognition, and performing skills). Students will work on a varied repertoire that is prescribed at their individual level. Students will perform for master classes within the department. Application of skills will be performed on keyboards or another instructor-approved instrument.

Music Theory
Level: College Prep
Prerequisite: Music Literacy I
This course offers an advanced approach to music and music construction. Students will learn the fundamentals of time and sound, note and rest values, notation, chord identification and construction, key signatures, time signatures, as well as extended knowledge of intervals, scales, triads, melodic and harmonic analysis, construction and composition.

Drama
Level: College Prep
Prerequisite: None
This class is intended to teach beginning actors the basics of acting technique, improvisation, group performances, stage movement, play writing and line interpretation.
**VISUAL ARTS**

**INTRODUCTION TO VISUAL ART**
Level: College Prep  
Prerequisite: None  
Credit: 1  
This course describes the varied career fields in visual arts. Students will experience drawing and sculpture in the classroom, and create an artist portfolio. This course is for the junior who is interested in the visual arts.

**ADVANCED DRAWING AND PAINTING**
Level: College Prep  
Prerequisite: Introduction to Visual Art  
Credit: 1  
This course builds upon the foundations established in Introduction to Visual Art with an emphasis on advanced drawing and painting techniques. The student will enhance drawing and painting skills, expressing high quality in one’s work. Presentation and display will be expected. Works in process and studio environment. The student will enhance drawing and painting skills, expressing high quality in one’s work.

**CERAMICS AND SCULPTURE**
Level: College Prep  
Prerequisite: Introduction to Visual Art  
Credit: 1  
This course builds upon the foundations established in Introduction to Visual Art using more challenging sculptural media and techniques emphasizing ceramic techniques. Subject matter and media manipulation will be advanced and push student creativity to solve challenging visual arts problems while perfecting techniques and skills.

**ADVANCED CERAMICS AND SCULPTURE**
Level: College Prep  
Prerequisite: Ceramics and Sculpture  
Credit: 1  
This course pushes the advanced sculpture student to create art works displaying highly refined skills in studio art and depth of content knowledge through research on a variety of artists. Students will be expected to create a legacy project which will remain at MHS beyond graduation. Students will be expected to create, discuss and write about art works.

**DRAWING AND PAINTING**
Level: College Prep  
Prerequisite: Introduction to Visual Art  
Credit: 1  
This course builds upon the foundation established in Introduction to Visual Art with immediate emphasis on advanced drawing and painting techniques. The student is required to create numerous works utilizing more challenging and original subject matter to communicate multiple layers of visual information.

**ADVANCED DRAWING AND PAINTING**
Level: College Prep  
Prerequisite: Drawing and Painting  
Credit: 1  
This course encourages the exploration of individual directions in various art processes with an open syllabus and studio environment. The student will enhance drawing and painting skills, expressing high quality in all work including presentation and display. Works in this course may be used to build their Art Portfolio.

**PHYSICAL & HEALTH EDUCATION**

**PHYSICAL EDUCATION**
Prerequisite: None  
Credit: 1  
Physical education provides opportunities for healthful and vigorous activities. Instruction is given for a large variety of activities including soccer, football, field hockey, basketball, volleyball, tennis, and others. Team and individual strategies are taught and game situations are used for practical application.

**HEALTH**
Prerequisite: None  
Credit: 5  
Health is a program based on State objectives that prepares students to make healthy choices. Personality, emotional health to include stress, abstinence-based education and substance abuse education are some of the topics studied.

**PHYSICAL & HEALTH ELECTIVES**

**STRENGTH TRAINING**
Prerequisite: Minimum of C in PE  
Credit: 1  
This class is designed to improve general knowledge of weight training techniques for safety and effectiveness as well as how to implement and design a weight training program for present and future use. Students should be able to physically demonstrate proper lifting techniques and be able to explain how to build a strength-training program that includes the proper usage of sets and order of exercises.

**FITNESS TRAINING**
Prerequisite: Minimum of C in PE  
Credit: 1  
This course is designed to give students the opportunity to learn fitness concepts and conditioning techniques used for obtaining optimal physical fitness. Fitness activities may include aerobics, flexibility training, jogging, Pilates, toning, yoga, speed walking, and cross training activities.

**ART PORTFOLIO**
Level: College Prep  
Prerequisite: Introduction to Visual Art and Two Other Visual Art Courses  
Credit: 1  
This course is for the high school senior who has completed three credits of visual art with a suggested grade of C or higher. This student will have chosen a career field in the visual arts. The student will review and rework a portfolio for college application. The senior will research post-secondary options, create a digital portfolio, compete in scholarship-based competitions, and prepare for college interviews during the semester.

**BUSINESS & FINANCE ELECTIVES**

**ACCOUNTING III**
Prerequisite: Accounting II  
Credit: 1  
Accounting III expands the principles, theories, and procedures introduced during Accounting II. Advanced applications & decision making based on financial reports is included in the course. Students will receive instruction on computerized accounting to make them employable & up to date on the current technology used in the accounting field.

**ADDITIONAL COURSE OFFERINGS**

**DELAWARE VOLUNTEER CREDIT**
Prerequisite: None  
Credit: 1  
The Delaware Volunteer Credit allows students grades 9-12 to earn one elective credit towards graduation upon completing 90 hours of community service during two semesters. The semesters do not have to be consecutive or in the same calendar year. Hours must be performed outside the student’s regularly scheduled school day. Volunteer hours completed as part of a service group requirement may also be used towards the Delaware Volunteer Credit. Volunteer activity cannot be political or advocacy in nature. Hours must be performed at a non-profit agency in Delaware. Service must be approved by the State Office of Volunteerism. Please inquire with your school counselor for more details.

**HONORS RESEARCH**
Non-Credited  
Prerequisite: Enrollment in Three or More Honors, AP, or Dual Enrollment Courses  
This is a course to enhance student’s studies in honors and AP courses. A specific structure will be provided for class time with checks for understanding and periodic conferencing to assist students in monitoring their progress in these courses. This course is graded pass/fail.

**SENIOR OPTIONS**
Prerequisite: Application Required  
Credit: 1  
Senior Options offers students the opportunity to further their education in a career area, demonstrate and extend career major competencies, and/or provide a service to the community. Students must apply to school counselors for acceptance and meet all requirements. Senior Options includes: College Coursework; Volunteer service, Internship, Cooperative work experience, or senior project.

**STUDY SKILLS**
Prerequisite: None  
Credit: 1  
This is a support class designed to instruct students proper study technique as well as provide previewing and support for core content classes.

**DRIVERS EDUCATION**
Level: Grade 10  
Prerequisite: Must be Classified as a 10th Grader in August of Sophomore Year  
Credit: 5  
This 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. At the completion of this course, students will be prepared to enter the Delaware Graduated Driver's License Program.

**ENGLISH AS A SECOND LANGUAGE**

**ENGLISH AS A SECOND LANGUAGE I**
Prerequisite: None  
Credit: 1 (Elective)  
This course is for non-English speaking students. Listening, speaking, reading, and writing skills will be developed based on basic vocabulary needed for the student to survive in an English-speaking environment.

**ENGLISH AS A SECOND LANGUAGE II**
Prerequisite: None  
Credit: 1 (Elective)  
This course is for limited English proficient students who need to continue developing their English language skills. Vocabulary will be expanded, and reading and writing will be strongly emphasized.

**ENGLISH AS A SECOND LANGUAGE III* **
Prerequisite: None  
Credit: 1 (Elective)  
This course is for limited English proficient students who need to practice all areas of English acquisition, including speaking and listening, but also focus more on reading and writing to prepare them for success in the mainstream classroom.

* Once students complete this course they may continue receiving tutorial assistance in completing their work requirements for other scheduled classes. Credit can still be obtained for elective purposes.
4 YEAR PLAN

**English**

- **Credits Required**: 4 Credits
- **Credits**: English 9 or higher
- **Credits**: English 10 or higher
- **Credits**: English 11 or higher
- **Credits**: English 12 or higher

**Mathematics**

- **Credits Required**: 4 Credits
- **Credits**: Algebra I or higher
- **Credits**: Geometry or higher
- **Credits**: Algebra II or higher

**Science**

- **Credits Required**: 3 or 4 Credits
- **Credits**: Physical Science or higher (Graduation Requirement)
- **Credits**: Biology or higher (Graduation Requirement)
- **Credits**: Biology or higher (Graduation Requirement)

**Social Studies**

- **Credits Required**: 3 or 4 Credits
- **Credits**: Human Geography or AP Human Geography
- **Credits**: U.S. Government & Economics or AP U.S. Government & Politics
- **Credits**: U.S. History or AP U.S. History

**Health**

- **Credits Required**: 1 Credit
- **Credits**: Health/Driver's Education

**Physical Education**

- **Credits Required**: 1 Credit
- **Credits**: Physical Education

**Spanish**

- **Credits Required**: 2 Credits
- **Credits**: Spanish I or higher
- **Credits**: Spanish II or higher

**Major Requirements**

- **Credits Required**: 3 Credits

**Suggested Electives**

- **Minimum Credits**: 3.5 Credit Minimum

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ADOPTED: 1/25/99; 9/28/09

REVISED: 01/2018

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4 Year Plan