

# 2018/19 Course Catalog



## Typical Design Thinking Academy Course Progression *(beginning Fall 2019)*

| GRADE 9  | GRADE 10   | GRADE 11  | GRADE 12   |
|--|--|---|--|
| English<br>Integrated Mathematics 1<br>Physical Science<br>Civics/Economics<br>World Language 1<br>Design Thinking Seminar<br>Physical Education | English 10<br>Integrated Mathematics 2<br>Biology<br>World Language 2<br>World History<br>Pathway Course Level 1<br>Driver's Education (.5 credit)<br>Elective<br>Health (.5 credit) | English 11<br>Integrated Mathematics 3<br>Chemistry<br>US History<br>World Language 3<br>Pathway Course: Level 2<br>Electives | Senior Capstone<br>English 12<br>Foundations of College Mathematics<br>Physics<br>World Language 4<br>Pathway Course: Level 3<br>Electives |

## State of Delaware Requirements *(24 Total Credits)*

**English** – 4 credits *(one each year)*

**Math** – 4 credits *(one each year)*

**Science** – 3 credits

**Social Studies** – 3 Credits

**World Language** – 2 Credits

**Physical Education** – .5 Credit

**Health** – .5 Credit

**Pathway** – 3 Credits

**Elective** – 3.5 Credits

## Senior Capstone

The Senior Capstone project is a year-long, credit bearing required course of study that provides an opportunity for students transitioning to college and career to plan and execute a long-term advanced creative project using the design thinking process. Throughout Senior Capstone, students create, ideate, synthesize and develop personal work products that showcase a complex and deep understanding of concepts, content and connections in a project of their own design. Senior Capstone Projects are showcased in May for the school and broader community.

## 5 Creative Pathways:

**1. ARCHITECTURAL ENGINEERING DESIGN**

Foundations of Technology  
 Process of Architecture & Construction  
 Architectural CAD Applications

**2. ART & DESIGN**

Foundations of Art & Design  
 Integrated Art & Design Portfolio  
 Art & Design Portfolio  
 AP Studio Art Drawing  
 AP Studio Art 2D Design  
 AP Studio Art 3D Design

**3. COMPUTER SCIENCE**

Exploring Computer Science (ESC)  
 AP Computer Science (CSP)  
 AP Computer Science A (CSA)

**4. ENTREPRENEURSHIP**

Entrepreneurship I  
 Entrepreneurship II  
 Entrepreneurship III

**5. MEDIA**

Introduction to Media  
 Integrated Media  
 Media Portfolio

**Notes:**

*Honors courses exist for students of above average interest or ability. Students enrolled in an honors course are expected to welcome additional work, faster pacing, higher quality, deeper thought. The prerequisites exist to help communicate how these expectations translate to students.*

## English Language Arts

**English 9**

English 9 offers an integrated study of language, literature, writing, and oral communication. English 9 students further develop their use of language as a tool for learning and thinking in accordance with Delaware State Standards. Students practice identifying, analyzing, and composing different elements, structures, and genres of written language. Through the study of different genres, students identify and analyze the author's purpose, perspective, and stylistic attributes that affect voice & message. English 9 helps students develop their voices as confident thinkers, readers, writers and speakers. A goal is to develop respectful, responsible, compassionate students who are motivated to pursue academic excellence.

*Prerequisite: None*

**English 9 Honors**

In order to challenge top performing students, this course will emphasize the same materials as English 9, but with much greater depth and added requirements and adaptations. Due to the accelerated nature of the course, additional units of study are included to challenge the top performing students with more in-depth reading assignments, complex composition topics and increased vocabulary and critical thinking. Students enrolling in English 9 Honors should be comfortable with high standards of performance and critical feedback designed to promote

progress. This is an accelerated class that will require considerably more outside preparation time than English 9. *Prerequisite: Language Arts standardized scores 80th percentile AND previous regular English grade of A or Honors level English grade of A or B.*

### **English 10 – British Literature**

English 10 is an integrated English course that incorporates both the Common Core State Standards for English/Language Arts and Delaware’s Academic Standard for English/Language Arts into the curriculum. The class focuses on British literature and is skills-based, requiring students to read short stories, novels, non-fiction articles, and poetry. Students experience various types of writing (argument, analysis, and persuasion), think critically, interact with assignments, and work in small groups. Students who complete the class will enhance their abilities to read critically, argue persuasively, research intelligently and write effectively.

*Prerequisite: English 9*

### **English 10 Honors – British Literature**

This course will emphasize the same course content as English 10, but with supplemental reading and writing components at a post-10th-grade level. Due to the advanced nature of the course, additional in-depth reading assignments, intellectually challenging composition topics, and increased vocabulary study will be required. *Prerequisites: Language Arts Standardized scores in 85th percentile, Previous English 9 grade of A OR Honors level English 9 grade of A or B.*

### **English 11**

English 11 Literature and Composition is an integrated English course that incorporates both the Common Core State Standards for English/Language Arts and Delaware's Academic Standards for English/Language Arts into the curriculum. The course is a study of language, literature, composition, and oral communication with a focus on exploring literature from a wide variety of genres and literary themes through classic and contemporary literature, nonfiction, and media literacy. Students use literary interpretation, analysis, comparison, and evaluation to read and to respond to representative works of historical and cultural significance appropriate for 11th grade, with a focus on American authors from diverse social and cultural backgrounds. Students examine and compose various types of writing including literary analysis, satire, synthesis, and narrative as well as multimedia presentations. They also conduct scholarly research by accessing, analyzing, and evaluating online and printed academic sources. Successful completion of this course will prepare students for rigorous senior-level courses focused in critical reading, academic research, and effective written expression. *Prerequisite: English 9, English 10*

### **English 11 Honors**

This course will emphasize the same course content as English 11, but with supplemental reading and writing components at a post-11th-grade level. Due to the advanced nature of the course, additional in-depth reading assignments, intellectually challenging composition topics, and increased vocabulary study will be required.

*Prerequisites: Language Arts Standardized scores in 85th percentile, Previous English 10 grade*

of A OR Honors level English 10 grade of A or B

## **English 12**

English 12 is geared for students who are challenged by the rigors of the traditional English class. The curriculum is built with those specific needs in mind. We take things at a slower pace, provide numerous supports, and offer engaging, and hopefully, appealing content, while teaching writing and reading skills. *Prerequisite: English 9, 10, and 11*

## **Journalism**

During this course, students will be introduced to areas within Journalism such as reporting current events, broadcasting, documentary/Investigative journalism. Students will engage in practical writing skills to effectively research, report, and publish their own original work. Throughout the course, students will gain exposure to key pieces of literature and footage, such as Capote's *In Cold Blood*, the Watergate scandal, and the terrorist attacks of 9/11 to analyze and see the role of reporting in the real world. Students will apply this knowledge toward projects relating to current events, investigative research, and a student driven newsletter. The focus on the course will center around what is ethical journalism and the practice thereof. *Prerequisite: 12th graders only*

## **Classical Literature Studies**

During this course, students will be introduced to the study of classical literature. Students will study key works throughout history. Students will analyze the significance of these literary works as well as the author's craft. This course will center on the concepts within critical theory and its usage to establish the value of a written work. Students will utilize these schools of thought to create their own form of critical theory. *Prerequisite: 12th graders only*

## **Academic Writing, Composition & Research**

During this course, students will be introduced to the practice of academic writing. Throughout this course, students will develop practical writing skills necessary for any college or career path. Students will gain experience in several projects relating to thesis-driven studies as well as public speaking and evidence-based arguments. Through their projects, students will also gain exposure to MLA/APA styles of formatting and citation. There will be projects ranging from organized debates to a Senior Thesis. The focus of this course will center on large scale research projects, such as proposals and thesis defense, through the practice of tone, diction, and higher-order thinking. *Prerequisite: 12th graders only*

## **Foundations of College English**

Foundations of English is a preparatory course designed to provide reinforcement in writing skills and improve reading fluency and comprehension skills. Reading and writing activities are integrated to provide continuity and practical application. Students completing the course with a score of 75% or higher will be qualified to take credit-bearing English coursework at Delaware institutions of higher education. *Prerequisite: English 9 and 10; Standardized test scores in English Language Arts below 480; recommendation from guidance department.*  
Required Info from State regarding FCE.

*The Foundations of College English is a preparatory course designed to provide reinforcement in writing skills and improve reading fluency and comprehension skills. Reading and writing activities are integrated to provide continuity and practical application. Students completing the course with a score of 75% or higher will qualify to take credit-bearing English coursework at Delaware institutions of higher education. This course is offered to students who have not reached the 480 PSAT/SAT benchmark for English Language Arts, but are seeking college-level coursework while enrolled in high school. **NOTE:** Per the State requirement, FCE does not count towards a student's English credit. FCE is an elective course that reinforces English skills and provides GREAT opportunity in the future. Successful completion of this course prevents the need for Remedial English courses at any Delaware college or university.*

# Mathematics

## **Integrated Math I**

Integrated Math 1 is a first-year math course designed to begin meeting the Common Core State Standards and prepare students for college-level mathematics. Statistics, linear and exponential models, algebra, probability, and geometry topics are presented in a problem-solving, investigative context with extensive use of technology. This course formalizes and extends the mathematics to practical applications using project-based learning and design thinking. The emphasis of the class is on reasoning, connections, and the effective communication of mathematical ideas. *Prerequisite: None*

## **Integrated Math 1 Honors**

This course will emphasize the same course content as IM 1, but in order to cover a broader range of topics and to dig deeper into the material, we will need to go at a faster pace. This means there is less time devoted to reviewing prior knowledge. Students will need a strong foundation in math as well as good work habits in order to be successful.

*Prerequisite: Previous Math grade of A OR Honors level Math grade of A or B*

## **Integrated Math 2**

Integrated Math II is the second of three high school-level courses that integrate algebra, geometry, trigonometry, and statistics under the Common Core State Standards. This course focuses on quadratic expressions, equations, and functions while comparing their characteristics and behavior to those of linear and exponential relationships as encountered in Integrated Math I. *Prerequisite: IM 1*

## **Honors Integrated Math 2**

This course will emphasize the same course content as IM 2, but in order to cover a broader range of topics and to dig deeper into the material, we will need to go at a faster pace. This means there is less time devoted to reviewing prior knowledge. Students will need a strong foundation in math as well as good work habits in order to be successful.

*Prerequisite: Previous IM 1 grade of A OR IM 1 Honors grade of A or B*

### **Integrated Math 3**

Integrated Math 3 is the third of three high school-level courses that integrate algebra, geometry, trigonometry, and statistics under the Common Core State Standards. The course extends the mathematics students learned in Integrated Math 2. Students expand their repertoire of functions to include polynomial, rational, and radical functions. It expands the study of right-triangle trigonometry to include general triangles. The units bring together data, functions, and geometry to create models and solve contextual problems. *Prerequisite: IM 2*

### **Integrated Math 3 Honors**

This course will emphasize the same course content as IM 2, but in order to cover a broader range of topics and to dig deeper into the material, we will need to go at a faster pace. This means there is less time devoted to reviewing prior knowledge. Students will need a strong foundation in math as well as good work habits in order to be successful.

*Prerequisite: Previous IM 2 grade of A OR IM 2 Honors grade of A or B*

### **Math 12**

Math 12 is a course available to students planning to attend college, but at risk of needing remedial college Math courses based on placement exams.

*Prerequisite: IM 1, IM 2, IM 3; SAT Math Score below 430; recommendation from Guidance Department.*

### **Foundations of College Math**

Foundations of College Math is a year-long course available to 12th-grade students planning to attend college. Students who successfully complete Foundations of College Math course are guaranteed entry into credit-bearing Mathematics coursework at any Delaware university.

*Prerequisite: IM 1, IM 2, IM 3; SAT Math Score between 430 and 520; recommendation from Guidance Department.*

### **Trigonometry**

A pre-Calculus course for the college bound student. The course includes a strong emphasis on circular and triangular trigonometric functions, graphs of trigonometric functions and identities and trigonometric equations, logarithmic and exponential functions.

*Prerequisite: IM 1, IM 2, and IM 3*

### **Math Dual Enrollment**

This course option is for juniors/seniors who have shown particular success in high school mathematics and have taken all available math courses at the high school. Specific course options may be discussed with the school counselor.

*Prerequisite: SAT Math Score above 520; Qualifying ALEKS Math Placement Exam; Recommendation from Guidance Department/Mathematics Department Chair approval.*

### **AP Calculus AB**

A college level course exploring the big ideas of limits and differentiation, while also introducing the student to integration, the Fundamental Theorem of Calculus, and finding areas and volumes. Success on the AP exam in May might confer college credit or placement.

*Prerequisite: Trigonometry or equivalent/Mathematics Department Chair approval*

### **Math Enrichment**

An elective course (it does not count toward the graduation math requirement) for students of any level to strengthen math skills.

## Science

*All science courses are aligned to the Next Generation Science Standards (NGSS) for high school.*

### **Physical Science**

Physical Science is a requirement for all 9th grade students and a prerequisite for Biology. This course provides students with a basic understanding of the following: scientific methods, how to perform scientific research, and proper use of lab equipment and procedures. The course introduces students to the aspect of design thinking principles applied to physics, chemistry and earth science. This course is designed to give students a solid foundation in the sciences that will prepare them for success in higher-level science courses. *Prerequisite: None*

### **Honors Physical Science**

Honors Physical Science covers the same standards as Physical science, but involves a deeper analysis and application of content with increased academic pace and rigor. Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory equipment and technologies, experimental procedures, and safety procedures are an integral part of this course. Exceptional reading comprehension skills are required. *Prerequisite: Recommendation from Guidance Department.*

### **Biology**

Biology is a requirement for all tenth grade students and a prerequisite for higher level science courses. Throughout the course, students will use case studies, investigations, simulations, and lab experiments to gain a deep understanding of the study of life. Students will collaborate with university and professional partners to apply design thinking skills in order to solve relevant problems within the community related to sustainability. Topics covered in this course include sustainability, ecology, cell biology, genetics, and evolution with an emphasis on interconnectedness and impacts on life on Earth. *Prerequisite: Physical Science*

### **Honors Biology**

Honors Biology covers the same standards as Biology, but involves a deeper analysis and application of content. The focus is gathering, synthesizing, and applying information/evidence. Students will be expected to combine information from text, discussions, notes, and activities to build in-depth comprehension of material. Students should have a solid understanding of basic

science concepts and principles before starting the class. Students are expected to demonstrate a high proficiency in prior math courses, as well as written and oral proficiency given the complexity of course content. A strong work ethic is required.

*Prerequisite: Eligibility for English 10 Honors AND Physical Science grade of A or Honors Physical Science grade of 80% or higher.*

## **Chemistry**

In Active Chemistry, students develop a community of practice and a culture of collaboration and communication. Students engage in scientific arguments using evidence and scientific knowledge and promote a deeper understanding through public practice. Students learn content through exploring chemistry applications across major fields, such as Movie Special Effects, Artist as Chemist, Chemical Dominoes, CSI Chemistry, and others. *Prerequisites: Physical Science, Biology*

## **Honors Chemistry**

Honors Chemistry follows much of the curriculum of Active CP Chemistry, but involves deeper analysis of chemical geometry as it relates to bonding and covers some aspects of acid/base and/or redox chemical reactions. This course uses more Process-Oriented Guided Inquiry Learning (POGIL) to promote higher level critical thinking skills. *Prerequisites: Eligibility for English 11 Honors, IM 2 grade of 80% or higher, AND Biology grade of A or Biology Honors grade of 80% or higher and IM 2 grade of 80% or higher.*

## **Physics**

Physics is a science course based on laboratory investigations of the main concepts and principles related to matter and energy. In this class students will be confronted with a series of situations and be asked to decide what factors might be related, how they can go about measuring them, and then collect the data. Students will learn how to use a computer to help graphically analyze data, and they will learn how to use a variety of representations to clearly describe the relationships found. Students will then go on to explore how the relationships discovered can be applied to a wide variety of new situations. Students will investigate matters such as motion, forces, momentum, electricity, magnetism, waves, and light. This course is highly recommended for all students who are planning science-related careers. *Prerequisite: Physical Science, Biology, Chemistry, IM 1, IM 2*

## **Forensic Science**

This course applies concepts of biochemistry, anatomy, physiology, and legal studies to survey key topics in forensic science. This includes the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Students will use the design thinking process to perform virtual and hands-on labs and to analyze fictional crime scenarios. Students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

*Prerequisites: Physical Science, Biology*



# Social Studies

## **Civics and Regional Planning**

This course is a survey course that traces teaches primarily about the United States government. Emphasis is placed on the the way the government functions and explains the Constitution of the United States. Attention is paid to the citizenship and the election process. This course is aligned to the Delaware State Social Studies Standards and is required for graduation.

## **Civics and Regional Planning Honors**

Your Civics course teaches primarily about the United States government. This course summarizes the historical forces that influenced the English and, later, American governments and describes the forms of government those forces created. The course gives an overview on the way the government functions and explains the Constitution of the United States. The final part of the course centers on citizenship and the election process. Scholars will engage in the Design Thinking Process to solve real-world problems and engage in project-based learning including, but not limited to mock elections, mock trials, and the creation and analysis of unique government systems.

The following are included in the course:

The Origins of American Government discusses the nature of government in general, and the forces that led to the development of the American system of government.

In The United States Constitution, you'll learn why the Articles of Confederation needed to be revised and how the writers of the Constitution went about their work. This unit also discusses the main principles of the Constitution—liberty, basic rights, and checks on the power of government.

Government in the United States provides an overview of government in the United States. You'll explore the three main branches of the federal government—legislative, executive, and judicial. You'll also learn how state and local governments fit into the bigger picture of American government.

The Political Process helps you understand the nature of the country you live in and explains your rights and responsibilities as a citizen of the United States. It also covers the political process, including elections and the effect of the media.

## **Holocaust and Genocide in Literature and Film**

This course is a survey course that examines the history and memory of the Holocaust and genocides throughout history. The study of the Holocaust and genocide is a multi-disciplinary one, integrating world history, geography, American history, and civics. The focus of this course will be on literature and film. Topics will include: antisemitism, racism, Nazism, the relationship

between war and genocide, collaboration and resistance, ghettos, concentration camps, rescue, liberation, displaced person camps, human rights, and memory. Our goal will be to examine main aspects of the Holocaust and ask informed questions about how consciousness of the Holocaust affects the way that we think about persecution and genocide in our own time. Our readings will cover a wide range of materials, including personal narratives, scholarly works, primary sources, memoirs, video testimonies, art, and films. *Prerequisites: U.S. History grade of B or higher, 11th and 12th grade students only.*

### **Introduction to Criminal Justice**

This course is a survey course that offers an overview of the legal system in the United States. Crime, justice, punishment, the police, prosecutors, courts, and correctional system will be investigated. Students will examine the theory and practice of law in several areas including origins of American law, court structure, criminal law and juvenile justice, community policing, torts and consumer law, family law, and individual rights and freedoms. The course is designed to encourage thoughtful debate on relevant topics and students are expected to participate in class discussion. Course requirements include participation in mock trial project. The course will include forensics projects. *Prerequisites: U.S. History grade of B or higher, 11th and 12th grade students only.*

### **Psychology**

Psychology is an elective course for students who wish to gain a better understanding of human behavior. Students will examine how humans learn and develop, how the mind operates, factors that affect human behavior, and how human behavior and interactions are influenced by society. Also covered are research methods, development of psychological surveys, and analysis of various approaches used to study and implement psychological practices, as evaluated by the DSM. Students will have opportunities to collaborate with professionals from the field and universities on current research projects. This is a research-focused course, so proficiency in reading and writing is a must. *Prerequisite: Biology grade of B or higher, 11th and 12th grade students, only.*

### **US History**

This course is a survey course that traces U.S. history from Reconstruction to the present. Emphasis is placed on the chronology, trends, and historical interpretations of major political, economic, and social events that have shaped American society through the twenty first century. Attention is paid to the relationship of past events to current issues and the changing role of the United States in a global context. This course is aligned to the Delaware State Social Studies Standards and is required for graduation.

### **Honors US History**

This course is a survey course that places major emphasis on the interaction of key events, persons, and groups with political, economic, social, religious, and cultural influences on state and national development from 1865 to present. Students will trace and analyze chronological periods, examine the relationship of significant themes and concepts in United States history, and develop skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis, interpretation, and research that uses primary and secondary sources. Major units focus on the Reconstruction of the US post-Civil War, Westward Expansion, The Development of Industry, Immigration and its impacts on the US, US Imperialism and World War I, Reforms of the Progressive Era, The Roaring 20s, The Great

Depression and New Deal, World War II, Life in the 50s and the Cold War, Vietnam and Modern US History. Connections are made between past events and their relationship to contemporary issues. *Prerequisite: Eligibility for English Honors in the appropriate grade level OR completion of Civics and Regional Planning Honors with a grade of A or B*

### **World History**

This course is a survey course that provides students with a comprehensive overview of social, political, religious, and economic systems of cultures around the world from the 15th to the 21st centuries. Topics include: The Renaissance; Protestant Reformation and the Enlightenment-era philosophies; the impact of the French Revolution on political, social, and economic world order; the effects of the Industrial Revolution on Western society, Imperialism, and the rise of Totalitarianism and Democracy. Connections are made between past events and their relationship to contemporary issues. *Prerequisites: Civics and Regional Planning*

### **Honors World History**

This course is a survey course that provides students with a comprehensive overview of social, political, religious, and economic systems of cultures around the world from the 15th to the 21st centuries. Topics include: the Renaissance; Protestant Reformation and the Enlightenment-era philosophies; the impact of the French Revolution on political, social, and economic world order; the effects of the Industrial Revolution on Western society, Imperialism, and the rise of Totalitarianism and Democracy. Connections are made between past events and their relationship to contemporary issues. Students investigate the content of world history for significant events, individuals, developments, and processes in seven historical periods, and develop and use the skills and methods including analyzing primary and secondary sources, making historical comparisons, chronological reasoning, and argumentation. Students will trace and analyze chronological periods, examine the relationship of significant themes and concepts in World History, and develop skills and processes of historical thinking and inquiry that involve chronological thinking, comprehension, analysis, interpretation, and research that uses primary and secondary sources. *Prerequisite: Eligibility for English Honors in the appropriate grade level OR completion of US History Honors with a grade of A or B, Civics and Regional Planning*

## **World Languages**

### **Spanish 1**

Spanish 1 provides instruction enabling students to discuss the many reasons for learning foreign languages and to develop an understanding of the people who speak them. Students are able to apply effective strategies for language learning and show a willingness to experience various aspects of the cultures. Within this context, the course provides students with opportunities to: respond to and give oral directions and commands and to make routine requests in the classroom and in public places; understand and use appropriate forms of address in courtesy expressions and be able to tell about daily routines and events; ask and answer simple questions and participate in brief guided conversations related to their needs and interests; read isolated words and phrases in a situational context, such as menus, signs, and schedules; comprehend brief written directions and information; read short narrative texts on simple topics; and write familiar words and phrases in appropriate contexts and respond in writing to various stimuli. Additionally, students learn about nonverbal communication, such as

gestures and body language; about awareness of current events in the cultures; the major holidays and geographical features of the countries being studied; greeting and leave taking behaviors in a variety of social situations; the appropriate way to respond to introductions and use courtesy behaviors; and appropriate etiquette in a variety of social settings. *Prerequisite: None*

### **Spanish 2**

Spanish 2 enables students to participate in classroom and extracurricular activities related to the language studied as well as to participate in conversations dealing with daily activities and personal interests. Students are able to: ask questions regarding routine activities; participate in conversations on a variety of topics; relate a simple narrative about a personal experience or event; interact in a variety of situations to meet personal needs, such as asking permission, asking for or responding to an offer of help, and expressing preferences pertaining to everyday life; understand main ideas and facts from simple texts over familiar topics; read aloud with appropriate intonation and pronunciation; and write briefly in response to given situations, for example postcards, personal notes, phone messages, and directions, as well as write letters using culturally appropriate format and style. Additionally, students become: familiar with major geographical features, historical events, and political structures of the country or countries being studied; familiar with different aspects of the culture, including the visual arts, architecture, literature and music, using the world language where appropriate; able to extend and respond to hospitality as a host or a guest; and aware of time expectations, such as arriving for appointments and social engagements. *Prerequisite: Spanish 1*

### **Spanish 3**

Spanish 3 provides instruction enabling students to understand and appreciate other cultures by comparing social behaviors and values of people using the languages being learned. Students are willing to initiate and participate in discussions concerning these cultures. In addition, students are able to respond to factual and interpretive questions and interact in a variety of social situations, such as expressing regrets, condolences, and complaints, and using more than rote memory formula phrases; read for comprehension from a variety of authentic materials, such as advertisements in newspapers and magazines, and cartoons and personal correspondence; read short literary selections of poetry, plays, and short stories; complete authentic forms and documents and take notes that require familiar vocabulary and structures; write paraphrases, summaries, and brief compositions; describe different aspects of the culture, using the world language where appropriate, including: (1) major historical events, (2) political structures, (3) value systems, (4) visual arts, (5) architecture, (6) literature, and (7) music; and seek help in a crisis situation and participate appropriately at special family occasions, such as birthdays, weddings, funerals, and anniversaries. *Prerequisite: Spanish 1, Spanish 2*

### **Heritage Spanish for Native Speakers**

This advanced level course is designed for fluent native or accomplished speakers of world languages who have demonstrated high degree of oral proficiency. The purpose of this course is to enable Native Language Learners to increase proficiency and bi-literacy in their native language by providing opportunities to improve reading and listening comprehension, as well as writing and grammar skills. Special attention will be given to grammar and vocabulary of the standard language, as well as to the importance of biculturalism and bilingualism in the United States today. Placement of students and development of the course curriculum is dependent upon the population of students enrolled in this course.

*Prerequisite: Oral and reading proficiency exam.*

# Pathways

## Entrepreneurship Pathway

*The Entrepreneurship Pathway is a cluster of courses that provide a broad, comprehensive curriculum that prepares students to become competent and literate in business skills, practices, and technology. In order to complete a pathway, students must pass three sequential courses. Students may earn college credit for some courses. Entrepreneurship I and Entrepreneurship II are required for pathway completion. Students may select their third pathway course.*

### **Entrepreneurship I: Introduction to Entrepreneurship**

Entrepreneurship I is an introductory course acquainting students with the basic concepts in business, finance, and marketing to be successful in business. Students will be exposed to the historical perspective, basic business terminology, and principles of

business. Students will gain knowledge and skills in business, personal finance, communications, career development, organization, information technology, business law, customer relations, economics, human resource management, marketing, operations, strategic management, and entrepreneurship. Students will ideate a business concept, formulate a business plan, and pitch their business idea. Students will compete in a business plan competition. *Prerequisite: None*

### **Entrepreneurship II**

Entrepreneurship II builds on Entrepreneurship I and focuses on building the knowledge and skills to take their business idea to the next level. Students will use computer software for production, web page design, internal control, business reporting and ownership, time management, setting goals, decision-making, group dynamics, oral and written communications. Students will use the lean canvas model to update their business concept and formulate a plan to bring their concept to reality. Students will compete in a business plan competition. *Prerequisite: Entrepreneurship I*

### **Entrepreneurship III: Marketing**

Entrepreneurship III: Marketing prepares students to understand, organize, design, and interpret marketing information for the ever changing business world. Marketing focuses on marketing concepts, functions, theories, and computerized programs to analyze the ways in which economic, consumer, and environmental variables affect the marketing process. Students will develop skills in the areas of selling, distribution, financing, marketing/information management, pricing, product/service planning, promotion, purchasing, and basic management. Students will draw on their skills to analyze and interpret statistical information to make sound business decisions. *Prerequisite: Entrepreneurship I and Entrepreneurship II*

### **Entrepreneurship Elective: Advanced Marketing**

This course is designed to enhance marketing skills developed in the marketing prerequisite courses and to learn advanced marketing skills. This course is based on the business and marketing core that includes communication skills, emotional intelligence, economics, marketing, operations, promotion, marketing-information management, and financial analysis. Instruction in this year of the program concentrates primarily on the development of competencies in the areas of sales promotion, merchandising, marketing research, and management. Entrepreneurship is an integral part of this class. The student is provided with a variety of learning methods including practical activities, simulations, computer activities, guest speakers, and role-playing. *Prerequisite: Entrepreneurship I and Entrepreneurship II; Marketing or Permission of Pathway Advisor,*

### **Entrepreneurship Elective: Accounting**

Entrepreneurship 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 stockholders. Students will have exposure to accounting, General Accounting practices and the principles, theories, and procedures necessary to complete the accounting cycle. Technology will be used for internal decision making, planning, and control. *Prerequisite: Entrepreneurship I and Entrepreneurship II*

### **Entrepreneurship Elective: Entertainment Management**

Entrepreneurship Entertainment Management offers Entrepreneurship students the opportunity to use marketing functions, theories, and computerized programs to analyze the ways in which consumers affect the marketing process. Students will concentrate on how customer relationships affect product development and product-mix strategies. Students will concentrate specifically on Sports Marketing, Fashion Marketing, Travel Marketing, and Entertainment and Music Marketing. *Prerequisite: Entrepreneurship I and Entrepreneurship II*

### **Entrepreneurship Elective: School Store**

Entrepreneurship School Store offers Entrepreneurship students real world experience managing the school store. Students will be responsible for managing the store, sales, marketing, and accounting. Students are supervised and must complete specific requirements. *Prerequisite: Entrepreneurship I and Entrepreneurship II; Permission of Pathway Advisor*

### **Entrepreneurship Dual Enrollment**

The Entrepreneurship Program has partnered with local universities. Students have the opportunity to take college courses in Entrepreneurship for college credit. *Prerequisite: Entrepreneurship I and Entrepreneurship II; Internal application process; Recommendation from Guidance Department.*

### **Entrepreneurship VII: Internship (Elective)**

Entrepreneurship VII: Internship provides students the opportunity for work-based experience. Students will be able to secure a job or internship experience and earn high school credit while working. Students will leave school early to report to their job or internship to out the skills learned to use. Students are supervised by an internship coordinator and must complete specific requirements. *Prerequisite: Entrepreneurship I and Entrepreneurship II; Permission of Guidance Department and Pathway Advisor*

## Media Pathway

*The Media Pathway is a series of three sequential courses that delve into aspects of media, focusing on visual media, with film, television, news, visual effects, and animation. Students will use the design thinking process as it applies to film, with pre production, production, and post production. In order to complete this media pathway, students must pass all three courses.*

### Introduction to Media

Students will use Intro to Media to build their knowledge of the basic concepts. We will focus on honing filming, editing, and visual storytelling skills. Students will use their knowledge to apply towards a scholarship video contest, gaining real world experience creating work for a specific audience and client. Students will play a variety of roles within each media discipline. For each unit, students will use the Design Thinking process to build their knowledge. They will Discover through observation, questioning, and research. They will Visualize with storyboards and filming plans. Filming and editing becomes their Prototype. Students will finally Present each project to the class for critique and review.  
*Prerequisite: None*

### Integrated Media

Integrated Media: The intermediate Media class expands on the introductory level knowledge and delves deeper into topics such as visual effects, motion graphics, and screenwriting, lighting, and advanced editing. *Prerequisite: Introduction to Media*

### Media Portfolio

This course will have students focusing on the practice, theory, and history of media. We will watch and analyze classic films and determine what makes a great film and how it can be applied to our own work. Students will carry out projects through the design thinking process. Students will have pre production, production, and post production expectations. Their work will be documented, critiqued and evaluated. Students will compile a portfolio and presentation reel to be showcased at the end of the semester. There will be an emphasis on film analysis, whether a historic film or their own work. *Prerequisite: Introduction to Media, Integrated Media*

### Broadcast Journalism (Media Elective)

This course delves deeper into the Media and what makes news news. Students will work to produce their own weekly student news show, sharing not only what is happening in our school, but also within our local community. *Prerequisite: Intro to Media*

### Photography

Students will develop and expand their skills in producing both artistic and commercial photographs using a variety of camera types, with a focus on digital DSLR cameras and equipment. Students learn to take artistic photos following rules of composition, light, exposure, elements of art and principles of design which also enhances their ability to produce quality commercial work. A variety of editing software and techniques will be interwoven throughout the course as students create a variety of projects to demonstrate mastery of technical and artistic skills.

***Successful completion of this course satisfies a one semester requirement for both the Media and the Art & Design pathways.***

## Architecture & Engineering Technology Pathway

*The Architecture & Engineering Pathway is a collection of courses designed to provide students with a basic introduction to a variety of branches of engineering, as well as to go into detail teaching skills and knowledge needed to be successful in a career in architecture, including but not limited to knowledge of universal design principles, and computer assisted design and drafting. Students who go on to pursue architecture in college will have a solid foundation to build upon. In order to complete this pathway, students must pass all 3 courses in the sequence from AET I to III.*

### **AET I: Foundations of Technology**

Foundations of Technology prepares students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. Technology content, resources, and laboratory/classroom activities apply student applications of science, mathematics, and other school subjects in authentic situations. Foundations of Technology focuses on the following three dimensions of technological literacy: 1. Knowledge 2. Ways of Thinking and Acting 3. Capabilities The goal is for students to develop the characteristics of technologically literate citizens. With these characteristics, they will have a better understanding of how the world works and ultimately become better contributors to society. Throughout the Foundations of Technology course, students will learn specifically about the STEM subjects of Technology and Engineering and exploring the way in which these fields interact with all other bodies of knowledge to create solutions to real-life problems. Our knowledge-based economy is driven by constant innovation. The foundation of innovation lies in a dynamic, motivated, and well-educated workforce equipped with STEM skills. However, the nature of our workforce and the needs of our industries have changed over time. Today, an understanding of scientific and mathematical principles, a working knowledge of computer hardware and software, and the problem solving skills developed by courses in STEM are necessary for most jobs. Therefore, STEM education is an enormous and pressing need. Students will participate in group and individual activities for creating ideas, developing innovations, designing, fabricating, and engineering practical solutions. The course materials will provide technology content, resources, and laboratory/classroom activities that require students to apply science, mathematics and other school subjects to engineer solutions to real-life situations. The work completed in this course will help students develop technological literacy, which is extremely important for their future. *Prerequisite: None*

### **AET II: Processes of Architecture and Construction**

Processes of architecture and construction will build upon the foundation of AET 1 and will expand upon the understanding of various types of blueprints into the creation of designs that take into account the landscape and needs of a structure, as well as learn and plan for construction techniques and environmentally conscious technologies used in modern buildings. Students will continue to develop more complete plans and models that could in principle be used to create a functional building, as well as begin to use computer software to produce 3D models of structures of their own design. By the end of the course, students should have the skills necessary to interpret existing designs and create designs for a custom home. *Prerequisite: AET I*

### **AET III: Architectural CAD Applications**



AET 3 will build upon the knowledge and skills from AET 1&2, and provide additional practice in using the tools of the trade in architecture to create workable computer-generated designs for structures including homes, as well as larger structures like office buildings. Students will learn fundamentals of civil engineering used to design neighborhoods, towns, and cities, and will create plans that could be used to create portions of these encompassing multiple functional structures. Students will develop an understanding of the various roles individuals play in these processes and the pathways involved in becoming qualified and employed in these fields.

*Prerequisite: AET I & II*

## Art & Design Pathway

The Art and Design pathway is a sequence of courses developed to assist in the learning of techniques from traditional to contemporary in the visual arts. Fine art and multiple design methods are used to enhance and build each student with a focus on individualized style and instruction. The pathway emphasizes both the design thinking process and a solid comprehension of the elements and principles of art. The goal for every student is to enter as a creative being and leave with the foundation of understanding one's self as a unique artist.

### Introduction to Art & Design

This course focuses on building the foundation of individualized and collaborative fundamental art skills needed to develop oneself as an active artist. Students will learn the basics of fine art skills from traditional to contemporary techniques. The goal is for students to end the course with a full supportive package of understanding where they stand as a creator with a solid foundation of art education. *Prerequisite: None*

### Integrated Art & Design

This course is designed for students who are peaking the advancement of individualized art skills and critical techniques. The focus is on pushing the boundaries of foundations learned of fine art and design. Students will be asked to professionally show their work through verbal, written and presented critiques. The goal is for students to begin perfecting their specific talent to create a career based idea of how to use art as a meaningful profession. *Prerequisite: Introduction to Art & Design*

### Art & Design Portfolio

This course will challenge students to create an artwork based upon all foundations of fine art. It is designed to prepare students to show a professional physical and digital portfolio for university purposes. The idea is that students have advanced beyond integrating art in their daily lives and are now moving forward to an idealized art career. By the closure of this course, students will be highly prepared to show off their hard earned art skills to the world. *Prerequisite: Introduction to Art & Design, Integrated Art & Design*

### AP Studio Art Drawing, 2D Design, or 3D Design \* New Course for 2018-19

AP Studio Art provides an opportunity for serious and committed fine art students to earn college credit for their fine art portfolios. Over the course of the junior or senior year, students create solutions for all three components of the AP Studio Art portfolio (Breadth, Quality & Concentration) and submit a total of 24\* works of art to the College Board in May. Rigorous

spacing, class critiques and exploration of a wide range of media and representational approaches successfully incorporating the elements and principles of art and design characterize the AP Studio Art experience. *Prerequisite: Introduction to Art & Design, Integrated Art & Design*

### **Photography**

Students will develop and expand their skills in producing both artistic and commercial photographs using a variety of camera types, with a focus on digital DSLR cameras and equipment. Students learn to take artistic photos following rules of composition, light, exposure, elements of art and principles of design which also enhances their ability to produce quality commercial work. A variety of editing software and techniques will be interwoven throughout the course as students create a variety of projects to demonstrate mastery of technical and artistic skills. *Offered in 2019/2020.*

*Successful completion of this course satisfies a one semester requirement for both the Media and the Art & Design pathways.*

## **Computer Science Pathway**

The Computer Science Pathway consists of three courses that dive into many areas of computer Science. Students will use design thinking, and participate in creative projects, to learn about the inner workings of a computer, design phone and computer applications, and experience the creative power of the computer programming language Java.

### **Exploring Computer Science**

Exploring Computer Science is appropriate for 9th - 10th grade students, with basic computer knowledge. The course takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. Students engage with computer science as a medium for creativity, communication, problem solving, and fun. The course inspires students as they dive into design thinking projects that include, creating their own websites, build a computer project, and participating in the future computer design experience.

*Prerequisite: None*

### **AP Computer Science Principles**

(AP CSP) curriculum is a rigorous, college-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. This class includes many design thinking projects, that allow students to experience a different level of computer science. Some of the projects include, Phone App Creation, Computer Application creation, Cyber Security projects, and many more! Students will have the opportunity to earn college credit for the course upon successful completion of the AP exam in May. *Prerequisite: Exploring Computer Science*

### **AP Computer Science A**

This advanced-level course is designed to help students master the basics of Java. This is a fast paced level college-level AP Course, design to challenge mathematics skills, and creativity. Highly recommend taking Exploring Computer Science and AP Computer Science Principles as a prerequisite to this course. This course is filled with Design Thinking projects that challenge creativity and thinking. Video game program project, IOS game

development, Creative Drone Experience, are just some of the Design thinking projects that students will experience in this course. Students will have the opportunity to earn college credit for the course upon successful completion of the AP exam in May. *Prerequisite: Exploring Computer Science & AP Computer Science Principles recommended.*

## Electives

### **Design Thinking Seminar**

Design Thinking Seminar is a 9th grade course designed to introduce new students to the Design Thinking Academy experience. In this marking period long course, students will learn the fundamentals of design thinking and complete several design thinking projects. By the end of Design Thinking Seminar students will be able to Discover, Visualize, Prototype, and Present. Students will question, research, develop criteria and constraints and empathize in the Discover phase. As students visualize, they will brainstorm many solutions, sketch ideas, refine ideas, and evaluate each idea based on criteria and constraints. Students will make prototypes, testing and revising each iteration and documenting their results along the way. Students will present their final product for review and feedback. Students will also learn about career pathway and college readiness options. *Prerequisite: None*

### **Health**

This course provides the basis for continued methods of developing knowledge, concepts, skills, behaviors, and attitudes related to student health and well-being. This course includes these major content areas: (1) wellness, (2) fitness and nutrition, (3) body systems, (4) human sexuality, and (5) substance abuse education. Students explore the effect of health behaviors on the quality of life. This course assists students in understanding that health is a lifetime commitment by analyzing individual risk factors and health decisions that promote health and prevent disease. Students are also encouraged to assume individual responsibility for becoming competent health consumers. *Prerequisite: None*

### **Physical Education I and II**

Physical Education I & II emphasize health-related fitness and developing the skills and habits necessary for a lifetime of activity. It also emphasizes a personal commitment to lifetime activity and fitness for enjoyment, challenge, self-expression, and social interaction. This program includes skill development and the application of rules and strategies of complex difficulty in (1) health-related fitness activities, (2) individual and team sports, (3) outdoor pursuits, (4) recreational games and (5) aerobic exercise. Ongoing assessment includes both written and performance-based skill evaluations. This course will also include a discussion of related careers. *Prerequisite: None*

### **Driver's Education**

Driver Education consists of a classroom-theory phase and an on-the-road lab phase. In this classroom phase, students will study the road rules of the State of Delaware, traffic accident causes and its effects on society, the physical and mental aspects of driving, and related safety

topics such as seatbelt use, road rage, and Defensive Driving. Students must earn a minimum of 77% or higher in order to pass the classroom-theory phase of the Driver Education Course. In the road phase, students will receive basic instruction in standard operational procedures, maneuvering the vehicle in confined areas, neighborhood driving, two and four lane highway driving, city driving and parking. *Prerequisite: 10th grade students only*

### **Senior Capstone**

Senior Capstone is a 12th grade course in which student work to discover, ideate, prototype, and present their senior projects. The course begins in the “discover” phase of the design thinking process, and ends with a capstone presentation to a review panel and an exhibition open to the community. Senior Capstone is a required course for graduation. *Prerequisites: 12th grade students only.*

