

2017-2018 Curriculum Guide Delaware Military Academy

The Delaware Military Academy, in partnership with cadets and parents, are working to develop our young men and women to be strong scholars, leaders and citizens. We call these the “three ships in our fleet.” We are a college prep program but we recognize that not all our graduates will choose to attend a post-secondary school. Our job is to ensure they are prepared for college regardless of what path they ultimately choose to pursue after graduation.

Our academic program is intended to ensure that every graduate is prepared, and qualified, to enter a 4 year post-secondary program of study. There are no general courses offered at DMA and all cadets are expected to participate in the college prep, honors, AP or dual enrollment programs. Our teachers have high standards in the classroom and cadets are expected to work at a high level each day to ensure they are prepared for the rigors of college, the armed services or the corporate world.

Cadets will be strongly encouraged to complete at least two honors level courses while at the Academy. Teachers will maintain high academic expectations in the classroom. After school tutoring is available (see the school calendar for details) for those cadets who require more time or assistance in order to meet course requirements. We are continually reviewing and updating our course offerings to reflect the most recent requirements established by private and public universities and colleges for admission.

DMA’s Post-Secondary Statistics (as of the Class of 2016):

- We have graduated 1292 cadets
- Our graduates have earned a combined 74,000,000 in scholarship monies
- 86% of our graduates go on to a 2 year or 4 year college program
- 11% enlist in the military after graduation
- 3% go directly in to the work force

DMA’s Mission

The Mission of the Delaware Military Academy is to prepare young men and women for their next level of education by providing them with a foundation that leads to good citizenship. Encouraged by military training, learning will take place within an environment that embraces both mental and physical health. This holistic approach to education fosters an understanding of the obligations of citizenship and self-discipline. In addition, cadets are exposed to positive moral ideals while being afforded opportunities to engage in appropriate social activities.

DMA’s Philosophy

- The role of the Delaware Military Academy is to educate the entire cadet, paying particular attention to academic, social and emotional needs
- An education at the Delaware Military Academy fosters citizenship, leadership and self-discipline

- Military training teaches cadets a sense of responsibility, integrity and morality
- Responsible citizens have a sense of honor and respect for themselves and for others
- Hard work, dedication and motivation are essential for learning
- Cadets, parents and teachers share accountability and responsibility for the cadet's education
- A safe and enjoyable learning environment promotes positive interaction between cadets and teachers
- Cadets graduate from the Delaware Military Academy ready to accept an adult role in society
- Community service builds strong character, unity and a sense of responsibility for others
- A Delaware Military Academy graduate exhibits creative, critical and independent thinking skills

Profile of Our Graduates:

Scholarship

- Ability to express oneself effectively in oral and written form
- Ability to think independently
- Proficient in all academic content areas
- Proficient in the use of technology
- Prepared to enter a post-secondary program of study

Leadership

- Ability to give and receive respect
- Ability to set goals, motivate others, and lead by example
- Ability to see a mission through to completion
- Maturity in thought and expression
- Commitment to excellence
- Command presence
- Integrity
- Physical and mental wellness

Citizenship

- Patriotism
- Cultural, political and environmental awareness
- Respect for rules and regulations in the community
- Regard for honesty in self and others
- Compassion and empathy for others
- Sense of duty to serve the community

ACADEMIC LEVEL OF COURSES

HONORS LEVEL COURSES

Cadets are eligible for honors courses beginning in ninth grade. Ninth grade cadets will be considered for honors level courses based on a number of factors including, but not limited to: 8th grade report card and teacher comments, SBAC test scores, Red Clay end of course assessment results, previous teacher recommendations, or DMA placement testing. The following 9th grade honors courses will be available:

- Honors English Composition
- Honors Civics and Geography
- Honors Biology
- Honors Algebra I (or higher depending on Middle School curriculum)

Cadets may apply to enter the honors program after 9th grade for all content areas where they have achieved a final grade of 90% or higher in the previous CP level course. Once a cadet has entered the honors track, they must maintain an 80% or higher in the honors course to remain in the honors track.

Entrance requirements for AP level courses are defined by the Delaware Military Academy and exceptions can be handled on a case-by-case basis.

Delaware Technical and Community College sets the admission requirements for all dual enrollment courses and they cannot be negotiated. Cadets may use SAT scores to determine placement or they may take the DTCC placement test. Cadets have up to two opportunities to obtain the required score on any DTCC placement test. The placement test will be administered at DMA in the spring by the DTCC advisement office. The following courses are offered at DMA for potential college credit:

ADVANCED PLACEMENT LEVEL COURSES

AP Biology – successful completion of a Biology course with an 85% or higher – seating will be based on your Biology grades **ONLY** and will be limited to the top 30 cadets who request the course.

AP Physics – successful completion of Honors Chemistry with an 85% or higher AND must have a minimum SAT mathematics score of 500 AND a minimum ERW (English, Reading and Writing) score of 500 by the end of junior year.

DUAL ENROLLMENT COURSES (IN CONJUNCTION WITH DTCC)

College Algebra (MAT180) - This course includes the algebra of functions, graphs and applications, absolute value equations and inequalities, polynomial, rational, radical, quadratic and piecewise functions, and the application of basic right triangle trigonometry. DTCC

Prerequisite: SAT Math Score of 500 or at least a 67 on the CPAL Placement test

Precalculus (MAT190) - This course includes a study of exponential, logarithmic and trigonometric functions, vector applications, complex numbers, simple curve sketching of algebraic and trigonometric functions, nonlinear systems, matrix methods, polar coordinates, and properties of conic sections.

Prerequisite: SAT Math Score of 599 or successful completion of MAT 180

Calculus (MAT281) - This course provides students with a study of limits and continuity and differential and integral calculus of single variable functions with applications.

Prerequisite: SAT Math Score of 599 or successful completion of MAT 190

Critical Thinking and Academic Writing (ENG101) - This college 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 academic essays and to respond to diverse texts in meaningful ways.

Pre-requisite: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

Composition and Research (ENG102) - This college course is designed to enhance writing, research, and speaking skills and to provide academic writing and reasoning skills to foster lifelong learning.

Prerequisite: ENG 101

US History: Pre Civil War (HIS111) - This course is a survey of colonial America and United States history through 1877. The course covers political, social, cultural, and economic factors that shaped the pattern of life in the United States through the period of Reconstruction.

Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

US History: Post Civil War (HIS112) - This course surveys United States history through 1877 to present. The course covers political, social, cultural, and economic factors that shaped the pattern of life in the United States.

Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

World History II (HIS210) - This course surveys world history from the sixteenth century to the present. Topics include political, social, economic, and cultural developments that shape the patterns of life on the African, American, Asian, and European landmasses. Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

DUAL ENROLLMENT COSTS

DMA will cover the costs of textbooks for cadets enrolled in dual enrollment courses. If a cadet would like to have a textbook for future use, they should purchase their own copy. This would allow them to write in and highlight in the textbooks. This is entirely optional as a textbook will be provided for classroom/home use but must be returned at the completion of the course. Cadets will pay for dual enrollment based on the number of potential credits earned. All dual enrollment math courses have the potential of earning four (4) credit hours while all other dual enrollment courses for the 2017-2018 school year have the potential for three (3) credit hours. The cost ***per credit hour*** will be **\$50** and must be paid prior to the first day of class for the course. Grant funds are available for cadets who qualify for free or reduced lunch. Credit will be earned based on cadet performance in the class, not a test single test.

For comparison purposes, here is the cost (per credit hour) for the local colleges:

DTCC Dual Enrollment @ DMA	\$50.00 per credit hour
DTCC On-campus Enrollment	\$139.75 per credit hour
Wilmington University	\$354.00 per credit hour
University of Delaware	\$481.00 per credit hour

DELAWARE TECHNICAL & COMMUNITY COLLEGE DROP/ADD POLICY

Students may choose to drop a course(s) by submitting a completed drop form to the Registrar or by completing the online drop procedure in Self-Service Banner. (The day the completed form is received by the Registrar's Office determines the official date of the course drop.) No approvals are required for students to drop a course(s) within the established time frames explained below. The following guidelines apply:

Courses dropped during the first two weeks of the semester will not show on the student's transcript and no grade will be recorded. From the third week through the tenth week of the semester, students may drop a course(s) and receive a "W" grade on their transcript. The "W" grade does not impact cumulative GPA, but it may negatively impact "time to completion" under the Financial Aid Satisfactory Academic Progress policy.

After the tenth week, courses may not be dropped. Student requests to drop a course(s) after the tenth week, with a grade of "W" for the course, will be considered only under extraordinary circumstances, which must be documented and approved by the DTCC Dean of Instruction or the Dean's designee. Students who do not officially drop a course(s) according to these guidelines, but stop attending the course will receive an Unofficial Withdrawal grade (U) for the course. An Unofficial Withdrawal grade is calculated in the cumulative index as 0 quality points

DMA Minimum Graduation Requirements

DMA Graduation Requirements include the Delaware Department of Education Requirements –

English	4 credits	Electives	3.5 credits
Social Studies	4 credits	Health & Physical Ed.	1.5 credits
Mathematics	4 credits	Naval Science	3 credits
Science	4 credits		
World Language	3 credits		

Upon meeting the Delaware Military Academy standards for graduation and completing the minimum State Standards for a high school diploma a cadet will be eligible for graduation. DMA reserves the right to require additional credits in a specific discipline in response to changes in State Regulations and admission policies for colleges & universities.

State of Delaware Law Graduation Requirements

Source: <http://regulations.delaware.gov/AdminCode/title14/500/505.shtml#TopOfPage>

4.0 Credit Requirements Beginning with the Graduation Class of 2016 (Freshman Class of 2012-2013)

4.1 Beginning with the graduating class of 2016, a public school student shall be granted a State of Delaware Diploma when such student has successfully completed a minimum of twenty four (24) credits in order to graduate including: four (4) credits in English Language Arts, four (4) credits in Mathematics, three (3) credits in Science, three (3) credits in Social Studies, two (2) credits in a World Language, one (1) credit in physical education, one half (1/2) credit in health education, three (3) credits in a Career Pathway, and three and one half (3 ½) credits in elective courses.

1.1 Definitions:

"Credit" means a minimum of 135 hours of actual classroom instruction or a demonstration of competency.

"Career Pathway" means a planned program of sequenced or specialized courses designed to develop knowledge and skills in a particular career or academic area.

DMA Grading Scale:

A	93 – 100	D	70 – 76
B	85 – 92	F	Below 70
C	77 – 84		

DMA Report Cards will be issued within five school days of the close of the semester. Academic Progress Reports will be sent home to parents after the fourth week of each marking period. All report cards and interim reports reflect the number grade, not a letter grade. This ensures that colleges have a clear picture of a cadet's performance and can accurately compare them against peers with different grading scales.

NOTE: No Course-Adds or Course-Drops will be permitted without a conversation with the Dean of Instruction and parent/guardian. The Dean of Instruction will determine if a Cadet may be excused from a specific course due to a documented learning issue. Additionally, conferences may be held to address such events as medical problems or a documented family crisis. Due dates for required work may be extended to allow the student to make up work within an agreed time limit.

Granting Credit

Cadets only receive credits for courses successfully completed. Granting course credit requires a passing final grade (70% or higher) and the satisfactory completion of all major course requirements as well as attendance requirements. Cadets who are failing a course will remain in that course for the remainder of the instructional timeline. Practice in mastery of important skills will help them prepare to succeed when they retake the course. All recovery credit will be completed outside of the school day, at the expense of the cadet.

Cadets must pass all of their classes which require 4 credits to graduate to be promoted to the next academic year. DMA does not offer summer courses to earn credit for a course failed during the academic year. It is the cadet's obligation and responsibility to enroll in a "make-up" course to earn credit(s) for any courses "failed" during the academic year. Credit Recovery may be accomplished by attending summer school at the cadet's district of residence, taking a course at a credit recovery school or a correspondence or online school with approval of the Dean of Instruction and school administration. A certified letter is sent at the end of each semester to any cadet who has failed a course. This letter includes directions for registering for and completing recovery coursework.

DMA COURSE OFFERINGS

English/Language Arts:

English Composition
World Literature
American Literature
British Literature
Studies in Drama
Publishing Class (Yearbook and Newspaper)
Dual Enrollment ENG101 (3)
Dual Enrollment ENG102 (3)

Mathematics:

Algebra I
Geometry
Algebra II
Pre-Calculus
College Math
Calculus
Dual Enrollment MAT180 (4)
Dual Enrollment MAT190 (4)
Dual Enrollment MAT281 (4)

Performing Arts

Marching Band
Concert Choir
Introduction to Theater Arts
Piano Fundamentals I
Piano Fundamentals II

Military Science

Naval Science I
Naval Science II
Naval Science III
Naval Science IV
Leadership Academy
Drill and Ceremonies

Driver's Education

Driver's Education

Social Studies:

Civics & Geography
Historical Economics
U.S. History
World History
Asian Studies
Contemporary Political Issues
Dual Enrollment HIS111 (3)
Dual Enrollment HIS112 (3)
Dual Enrollment HIS210 (3)

Science:

Integrated Science
Biology
Chemistry
Physics
Intro to Engineering
Forensics
Food Service/Nutrition
Anatomy and Physiology
Science Olympiad
Environmental Science
AP Biology
AP Physics

World Languages

Spanish I
Spanish II
Spanish III
Spanish IV
Spanish Cultural Studies

Health & Gym

Physical Education
Health (offered online only)

Business and Technology

Bus. Finance & Marketing
Bus & Corp Management I
Bus & Corp Management II
Business Communications

Additional classes may be added as we move in to a new school year.

DMA Course Descriptions

ENGLISH/LANGUAGE ARTS

Literature & Composition

Cadets learn to analyze literature and to understand the author's purpose and techniques. They develop their vocabulary skills in preparation for PSATs. In addition to improving reading and grammar skills, emphasis is placed on the writing process which includes prewriting techniques, organizing material, creating first drafts, editing and publishing the corrected final version.

World Literature

This course is a survey of thematically integrated English and multicultural literature. Cadets learn the relationship between the writing of a literary period and the historical and social forces that characterize that time. There are frequent and varied writing experiences exposing the cadets to different written genres, such as; comparative analysis, literary analysis, reflection papers, and persuasive writing. The course focuses on both non-fictional and fictional genres. In composition, the cadets develop skill in writing persuasive essays using the basic techniques of research and MLA formatting. Cadets continue to increase their vocabulary skills in preparation for SATs.

American Literature

In this course, cadets will broaden their understanding of what it means to be an American by experiencing literature from America's earliest beginnings through modern day. The course focuses on critical thinking in response to literature, as well as, emphasizes analytical writing and the research writing process. SAT preparation is addressed through vocabulary practice, exposure to SAT question varieties and review strategies. Finally, it will review essential college- and career- ready skills and knowledge in reading, writing, speaking, and listening.

British Literature

British Literature is a survey course of British Literature and its cultural contexts. Cadets will develop a deeper understanding of British culture, from its earliest beginnings of the English civilization through the modern era, by examining works from a vast variety of British writers and time periods. Cadets will also make relevant, modern-day connections to the texts by relating the studied themes, motifs, and styles to contemporary works of all 21st century mediums. Cadets will also become well-versed in the research and writing process. They will gather extensive knowledge in all parts of the research and documentation process and will be required to submit a Senior Research Paper.

Studies in Drama

This course introduces you to one of the major genres of literature: drama. We will study the major elements of drama and will be reading plays of varying length and complexity, some tragic, some comic, and some in between. The readings include dramas that originate from various cultures and time periods. We will also read some supplemental

writings about these plays. The aim is to expose you to the variety and quality of theater to help you to understand it, to begin to think critically about it, and appreciate it more fully. The plays we will explore are the following: 12 Angry Men – Reginald Rose; Medea – Euripides; Waiting for Godot – Samuel Beckett; Arsenic and Old Lace – Joseph Kesselring; The Importance of Being Earnest – Oscar Wilde; The Glass Menagerie – Tennessee Williams; A Midsummer Night’s Dream – William Shakespeare; Dial ‘M’ for Murder – Friederick Knot; Our Town - Thornton Wilder

Journalism 101

In this course, we will use real-life, published products to study the principles and practices of journalism as well as journalism's role in society. Our primary products for this course will be the DMA YEARBOOK (Seahawk) and NEWSPAPER (Scuttlebutt). We will explore journalism's impact on public policy, private lives, and the increasing role of citizens within the context of the contemporary convergence of multimedia. Class discussions will address the historical development and future of the field, including new technologies and changing strategies. Techniques, methods, and models guiding the contemporary practice of journalism will be given particular emphasis, and will be implemented in the production of the yearbook and the newspaper. We will cover news, feature, and profile writing, cultural commentary, op-ed, and narrative journalism. The fundamental skills of a journalist will be introduced, including research and interviewing, fact-checking and editing, style and writing skills, photography, and distribution/business. Guest speakers may include journalists who can speak to specialized areas of journalism. Open to all grade levels; editorial staff will be selected from the Junior and Senior Classes by the instructor.

Critical Thinking and Academic Writing (DTCC ENG101)

This college 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 academic essays and to respond to diverse texts in meaningful ways.

Pre-requisite: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

Composition and Research (DTCC ENG102)

This college course is designed to enhance writing, research, and speaking skills and to provide academic writing and reasoning skills to foster lifelong learning.

Prerequisite: ENG 101

MATHEMATICS

Algebra I

This is the first course in the mathematics program with a strong focus on Algebra I concepts. In this course, cadets will learn how to perform algebraic manipulation of variable expressions and equations, including the use of absolute value, exponents and radicals. Cadets will learn how to use multiple representations of linear, exponential and

quadratic functions to model real life situations and will be able to convert between these representations. Concepts in geometry, statistics, and discrete math are integrated throughout the curriculum, emphasizing the connection between all strands of mathematics. Technology is used on a daily basis to support and improve mathematical understanding. Required for graduation in the State of Delaware.

Geometry

This course is designed to emphasize the study of the properties and applications of common geometric figures in two- and three-dimensions, with particular emphasis on triangles, quadrilaterals, and circles and their three-dimensional extensions. It includes the study of transformations and right triangle trigonometry. Inductive and deductive thinking skills are used in problem solving situations, and applications to the real world are stressed. Required for graduation in the State of Delaware.

Prerequisite course: Algebra I

Algebra II

Algebra II is a continuation of the skills learned in Algebra I. Algebra II covers quadratic equations, graphing, complex numbers, functions, and exponents. Problem solving skills are emphasized throughout, and time is devoted to advanced topics like linear programming and piecewise functions. Required for graduation in the State of Delaware.

Prerequisite courses: Algebra I and Geometry

Pre-calculus

This course is offered to cadets who have successfully completed Algebra II. In pre-calculus, cadets will continue their study of functions and build on their algebra skills. There will be a focus on linear, polynomial, rational, exponential, logarithmic, parametric, and trigonometric functions, as well as an introduction to the concept of limits.

Prerequisite courses: Algebra I, Geometry and Algebra II

College Math

This course is offered for cadets who have successfully completed Algebra II but are not planning to pursue a STEM related major in college. The class will strengthen all areas of the cadet's algebra skills and will cover algebra concepts not included in Algebra I and II. In addition, this course will include right triangle trigonometry. Cadets will be prepared for all college math placement tests upon completion of this course.

Prerequisite courses: Algebra I, Geometry and Algebra II

Calculus

A college preparatory course that will cover the three main concepts of calculus: limits, derivatives, and integrals. The class will expose each student to the techniques of computation and applications to the real world. Upon completion, students will be well prepared for Business Calculus at the college level.

Prerequisite course: Pre-calculus

College Algebra (DTCC MAT180)

This course includes the algebra of functions, graphs and applications, absolute value equations and inequalities, polynomial, rational, radical, quadratic and piecewise functions, and the application of basic right triangle trigonometry. Cadets must have completed Algebra II to enroll in this course.

Prerequisite: SAT Math Score of 500 or at least a 67 on the CPAL Placement test

Precalculus (DTCC MAT190)

This course includes a study of exponential, logarithmic and trigonometric functions, vector applications, complex numbers, simple curve sketching of algebraic and trigonometric functions, nonlinear systems, matrix methods, polar coordinates, and properties of conic sections.

Prerequisite: SAT Math Score of 599 or successful completion of MAT 180

Calculus (DTCC MAT281)

This course provides students with a study of limits and continuity and differential and integral calculus of single variable functions with applications.

Prerequisite: SAT Math Score of 599 or successful completion of MAT 190

SOCIAL STUDIES

Civics & Geography

The course familiarizes the cadets with the American political system. They learn that the United States has a federalist, republican, and presidential form of government.

Considerable attention is paid to the three branches of government, how bills become laws, and the political processes involved. The cadets will learn about the US Constitution and important constitutional issues as civil rights, the freedoms guaranteed in the Bill of Rights, and the relevant Supreme Court decisions.

In the Geography portion of the course, the cadets develop an understanding of both the spatial and cultural relationships of the major world realms. Emphasis is placed on how different world regions contribute to the richness of human fabric. The cadets learn how humans adapt to such factors as climate and physical topography. The cadets also develop a working mental map of the political and physical features of the world, and of specific nations. Significant attention will be devoted to current events, political developments and trends.

Historical Economics

This course provides cadets with the knowledge and decision-making tools necessary for understanding how a society organizes its limited resources to satisfy its wants. Cadets will understand the choices members of the economic community make. They examine how resources are allocated through market and non-market mechanisms. Topics include: supply and demand analysis; theory of consumer demand; theory of the firm including production and costs, perfect competition, monopoly, monopolistic competition and oligopoly; and public policy analysis of various issues including, but not limited to,

taxation, externalities and market structure. Cadets will apply their knowledge to historical examples.

United States History

This course is designed to provide cadets with the analytical skills and factual knowledge necessary to deal critically with the problems and concepts of U.S. History. The course has cadets practice their writing skills and research skills through writing assignments and projects. They will analyze primary source documents and learn how to interpret different historical perspectives and learn the social, political and economic changes that have occurred throughout United States History. The course provides a balance between factual knowledge and critical analysis of the major concepts and trends that has defined this nation. It will concentrate on the Industrial Revolution (1820s) through the Cold War.

World History

The peoples of the West have had to deal with a number of significant changes to their world view: from a flat to a round world, from a geocentric to a heliocentric universe, from a polytheistic but secular, strong centralized civilization to a monotheistic and devout decentralized feudalism, and from a religiously and spiritually oriented society to a materially - and secularly - oriented one. From these past struggles and how peoples coped with such difficult changes come useful models for coping with the world we are living in. This course is the study of the major cultural, economic, military, political, religious, and social events in Western History from antiquity to the 20th Century. Particular attention is given to the Western societies' contacts with the peoples of Africa, the Americas, and Asia.

Asian Studies

Asian Studies is an exploratory learning course that will delve into the vast ocean that is Asian Studies. In this course, we will be investigating the following topics related to Asia: major historical events, current political and economic affairs, geography, human rights issues, cultures and cuisines, significant attractions and landmarks, and even some basic learning of the Mandarin language! Each cadet will select an Asian nation that they will become the “delegate” for, and they will be responsible for keeping the class informed of the important happenings of their nation and be responsible for completing projects on their nation. Additionally, you will have the opportunity to meet with prominent figures from various regions of Asia, including human rights lawyers, historians, economists, and counterterrorism experts.

Contemporary Political Issues

Contemporary Political Issues or C.P.I. is a course centered on the study of events in U.S. History from the end of World War II to Modern Times. Cadets will analyze the key events of this time period to gain an in depth understanding of how these events helped in the shaping of the political, social and economic ideology of our current society. Cadets will be exposed to a variety of resources through their study of one of the most significant time periods in American and World History. All course content is in alignment with the

Delaware State Social Studies Standards in History, Economics, Geography, and Civics, along with the Common Core Standards of Reading Literacy in History.

US History: Pre Civil War (DTCC HIS111)

This course is a survey of colonial America and United States history through 1877. The course covers political, social, cultural, and economic factors that shaped the pattern of life in the United States through the period of Reconstruction.

Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

US History: Post Civil War (DTCC HIS112)

This course surveys United States history through 1877 to present. The course covers political, social, cultural, and economic factors that shaped the pattern of life in the United States.

Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

World History II (DTCC HIS210)

This course surveys world history from the sixteenth century to the present. Topics include political, social, economic, and cultural developments that shape the patterns of life on the African, American, Asian, and European landmasses

Prerequisites: SAT ERW score of 475 or a score of 78 on CPT Reading test AND a score of 84 on CPT Sentence Skills test

SCIENCE

Integrated Science

This course consists of three curricular units designed by the Delaware Science Coalition that cover topics in Energy Across Systems, Introduction to Chemistry, and Earth Systems. Cadets will be involved in a hands-on and inquiry based classroom activities throughout the three units.

Biology (REQUIRED)

Biology is a laboratory science course that covers the study of living things. Biology focuses on the study of life by examining the five fundamental concepts of cellular biology, genetics, ecology, evolution and physiology. The scientific process and laboratory skills are emphasized along with biology's connections to other scientific disciplines. Students learn scientific writing skills and also examine current biological issues. The foundation of the class is based upon the standards developed by the Delaware Board of Education. *(A ninth grade honors section is available for cadets who are enrolled in honors algebra I, geometry or algebra II as a 9th graders)*

Introduction to Engineering (.5 credit 10th grade elective)

Introduction to Engineering is a half-credit course that provides exposure to engineering principles involved in the design process, properties of materials, failure analysis, cost of

quality and other real-world engineering challenges. As engineering is interdisciplinary, this course explores topics from a wide variety of fields helping students understand the range of potential engineering careers.

Forensics (.5 credit 10th grade elective)

Forensic Science is the application of science to the enforcement of laws within the criminal justice system. This course will serve as a comprehensive introduction to the study of forensic science through the integration of historical contexts, the criminal justice system, physical and biological sciences, and ethics. Students will be introduced to the roles of police officers and forensic laboratory technicians during investigations. The course will focus primarily on the collection and analysis of evidence.

Introduction to Food Service/Nutrition (.5 credit 10th grade elective)

This course introduces the field of food science and technology with emphasis on the science behind food technology, the importance of food in providing proper nutrition, including their application to health and well-being of humans throughout the life cycle and the role of diet therapy in the prevention and treatment of disease.

Chemistry (REQUIRED)

The course will focus on chemistry as a whole as it covers most aspects of inorganic, organic, nuclear, and biochemical studies while reviewing the chemical basics of scientific methods, gas laws, the atom, the periodic table, chemical bonding, reactions, analysis, and electrochemistry. The course will emphasize laboratory studies with individual and team research. Cadets must have sufficient writing ability to participate in projects to present scientific findings in publishable format.

Physics

Physics is offered at three levels: CP, Honors and AP. All three courses are algebra-based and provide an introduction to the major areas of Physics including mechanics, electromagnetism, sound and light. The AP and Honors courses are intended for cadets entering college in any technical area such as engineering, medical, the sciences or construction. The CP course is intended for cadets entering college in a non-technical area and provides skills in problem solving and general understanding of physical phenomenon including cost of energy and renewable energy.

Human Anatomy & Physiology

Human Anatomy and Physiology is a laboratory science course that consists of an in-depth study of all of the major body systems that maintain homeostasis from anatomical and physiological perspectives. Students explore the body through an inquiry approach. Prerequisite: Successful completion of a biology course.

Environmental Science

Environmental Science is a laboratory science course designed to provide students with the scientific principles, concepts, and methodologies required to understand the inter-relationships of the natural world, to identify and analyze environmental problems both

natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

AP Biology

This course is designed to be the equivalent of a college introductory biology course usually taken by biology majors during their first year. Cadets accepting the challenge of an Advanced Placement course will be required to actively participate in all lectures and laboratory activities that are conducted during the year. There is an extensive reading requirement associated with this course. Cadets aiming to take AP Biology must obtain teacher recommendations and successfully complete the assigned summer enrichment. All cadets enrolled in this course are expected to take the College Board's Advanced Placement Biology examination in the spring.

Specific entrance requirements are found on page 2 of this document.

Prerequisites: Biology

AP Physics

AP Physics is equivalent to a first semester college course in Physics and covers six major areas of study: Mechanics, Fluids, Thermodynamics, Electromagnetism, Optics and Quantum Mechanics. The course designated AP Physics B is algebra-based and is intended for students pursuing careers outside of the pure sciences & engineering. The course designated AP Physics C is calculus-based and is an introductory course for careers in the sciences and engineering. Currently AP Physics B is offered as a scheduled class. Independent study is available for the additional content covered in AP Physics C. Both courses include lecture, demonstration, lab exploration and a significant homework commitment. All cadets enrolled in this course are expected to take the College Board's Advanced Placement Physics examination in the spring.

Specific entrance requirements are found on page 2 of this document.

Science Olympiad

Cadets will design, build and present projects at the State level competition for Science Olympiad. Cadets may choose from several different areas of expertise in which they compete with other cadets throughout the state. Science Olympiad is open to all Cadets.

WORLD LANGUAGES

Spanish I

During the first year, the basic points of Spanish grammar and simple materials concerning Spanish culture are read and discussed. The ability to speak and understand Spanish in everyday situations is emphasized. The oral practice is daily and reinforces the home study of vocabulary and grammar. The goal of the course is to provide exposure to the language through listening and reading while developing their abilities to express themselves orally as well as in written form.

Spanish II

In the second year of Spanish, there is a review of the grammar of the first year and a completion of the study of formal grammar. Reading selections are designed to provide insight into Spanish and Spanish-American culture. Oral-aural drills are used extensively early in the year, and later, discussions of the reading material and practice in conversational Spanish receive emphasis.

Prerequisites: Spanish I or passing grade on Spanish placement test (given by request)

Spanish III

The third year classes are conducted almost entirely in Spanish. While there is a review of formal grammar, emphasis is placed upon extensive reading, and oral and written plays are read aloud to increase speaking skill. Writing skills are also emphasized. At this level, students are expanding on previous themes and adding vocabulary to be used in more extensive paragraph writing. New verb tenses are learned along with the ability to use these tenses in conversations.

Prerequisite course: Spanish II

Spanish IV

Level four incorporates an AP literature book which introduces students to various famous authors well known to the Spanish speaking world. Complex verb tenses are covered which allows for a more advanced level of writing and speaking. Honors Spanish level four is a solid basis for students intending to continue with the language into university.

Prerequisite course: Spanish III

Spanish Cultural Studies

This course is designed to explore the language, culture and history of Spanish speaking countries. Each unit will focus on a specific country/region or related issues/customs spanning multiple countries. We will explore each unit through authentic resources (primarily online newspapers/ research articles) and film. In each unit Cadets will learn new vocabulary pertinent to the unit, the history of the region/issue, colloquial phrases and related customs/celebrations. Although there will not be a primary focus on grammar, there will be some review and an expectation of prior knowledge. All work will be done in Spanish.

Prerequisite course: Spanish III or concurrent registration with Spanish III

BUSINESS

Business Finance and Marketing Core Class

Business Finance and Marketing Core introduces cadets to the world of business including introductions to basic Entrepreneurship, Marketing, and Personal Finance. This is done with the integration of all Microsoft Office programs including Microsoft Word®, Microsoft Excel®, and Microsoft Publisher®. Cadets will also be involved with Finance Park, a program developed by Junior Achievement of Delaware where they will

participate in a day of actual personal finance activities. All activities are associated with the state standards mandated by Business Professionals of America.

Prerequisites: none

Business & Corporate Management II

In Business & Corporate Management II, cadets delve into Entrepreneurship on a more “personal” level where they create a fictitious business and follow the process of creating twenty segments of a real Business Plan including creating their company name, LOGO and all marketing materials including business cards, one-page flyers, PowerPoint presentations, tri-fold brochures, and newspaper ads. They learn and analyze their own financial statements, database management, and executive summaries. All Microsoft Office® software is integrated into all projects. All activities are associated with the state standards mandated by Business Professionals of America.

Prerequisites: Business, Finance & Marketing Core class

Business & Corporate Management III

In Business & Corporate Management III, cadets concentrate on the Management aspect of business or how to actually run a business. They join other cadets in small groups, create a business, create jobs and job descriptions, hire staff, and design their businesses using architectural design software. Cadets study, compare, and contrast various management and leadership styles and act them out in class by creating skits and scenarios and show how each style deals with the scenarios. They are also active in the daily operations of the DMA lunch program and the morning café where they actually run the business on-site and handle financials. All Microsoft Office® software is integrated into all projects. All activities are associated with the state standards mandated by Business Professionals of America.

Prerequisite: Business & Corporate Management II

Business Communications & Professionalism

Cadets in the Business Communications & Professionalism course will learn key skills, knowledge and tactics that will help them be successful in the business world. Cadets will learn the importance of proper communication skills, interpersonal skills and the value of being able to successfully work on a team. This technology based course will prepare cadets for the interview process and will teach cadets proper business etiquette along with presentation skills. Cadets will fully understand the benefits of networking, mentoring and work related experience. Customer service skills will also be taught as well as personal improvement tactics that relate to goal setting, self-motivation and self-improvement.

Prerequisite: Open to juniors and seniors

PERFORMING ARTS

Marching Band

Band is a performance-based class. Performances at football games, competitions, and parades will be observed as grades. Cadets will also receive points for in-class and after

school rehearsals. All performances will be announced at least 3 weeks in advance and are mandatory unless otherwise noted. When the fall marching band season ends, the focus will be on parade work, scales, and lessons on music theory. In the spring, cadets will begin preparation for festival events and parades, as well as prepping for the upcoming fall music selections. A mandatory band camp will be held in August in order to prepare for the marching season.

Performances and rehearsals (including summer band camp) outside of class are REQUIRED for successful completion of this course

Concert Choir

This course is for cadets interested in performing in a vocal music ensemble. Cadets will also learn music basics, such as some music theory and history. As this is a performance-based course, attendance at evening concerts is a mandatory requirement unless otherwise noted. The grading system for the DMA Chorus is a point based system. During the non-performance season, cadets will practice lessons in music theory, sight-reading, and sight-singing and will be assessed with quizzes and tests during that marking period.

Performances and rehearsals outside of class are REQUIRED for successful completion of this course

Piano Fundamentals I and II

This course will focus on the aspects of reading music, music theory, music notation, and learning how to play the piano at the beginner level. This course is for cadets who are interested in learning how to read music and apply that knowledge to the keyboard. During this course, the cadets learn different musical notations, such as note durations, the staff, major and minor scales, key signatures, etc. Cadets participate in group lessons, as well as individual lessons during class time. Cadets will work at their own pace using the provided piano lesson and theory books. Each keyboard will be accompanied with a set of headphones which the cadet will wear during individual practice time. By the end of this course, each cadet will be able to look at a musical score and be able to play it on the piano, as well as have the tools needed to be able to transfer learned musical knowledge to other instruments, choirs, etc. This course will provide each cadet with their own keyboard, stand, bench, and set of headphones (in-class use only). Once cadets have completed the first level, they are eligible for enrollment in the second level.

Prerequisites: none

OTHER ELECTIVES

Physical Education

The overall goal of the Physical Education and Health program at DMA is to provide every cadet with a positive personal attitude, to place emphasis on the need for physical activity, and to stress how it correlates to an individual's total health. Cadets will obtain knowledge and skills necessary for the development of a healthy, physically-active lifestyle, and an understanding that physical activity can provide enjoyment, challenges, self-expression, and social interactions that will last a lifetime. Course content will follow the State of Delaware curriculum standards and guidelines. The Physical Education

program will stress biomechanics, continued large and small motor skills learning, social psychology within athletics, self-management, as well as, strength and conditioning. This is a required course for graduation in the State of Delaware.

Health

The Health class is offered as an online courses through Educere, Inc. This course introduces cadets to aspects of physical, emotional, and personal health. Issues about Anatomy, Physiology and Family Life and Human Sexuality will also be discussed. This is a required course for graduation in the State of Delaware.

Driver's Education

The State of Delaware, Department of Education approved Driver Education course is offered to all sophomores (in order of birth date) at DMA. The curriculum is developed by the State and administered by a State Certified driving instructor. Students will receive thirty (30) hours of instruction in the classroom daily during one of two mid-day mini-blocks. Students will then receive seven (7) hours of instruction behind the wheel and seven (7) hours of active observation in the "in-car" training. Students will miss one (1) academic class during that marking period. The State awards one (1) academic credit hour for this course. Upon successfully completion of the course, the student along with a parent or guardian can exchange the completion certificate for a Delaware Graduated Driver License (GDL) at Department of Motor Vehicles (DMV). A written test or driving test is NOT required for the student to obtain their GDL license at DMV. In the event there are not enough seats for all 10th graders to complete the course during the school year, there is an option for completion during the summer following sophomore year at no cost to the cadet.

Prerequisites: Cadets must be passing all but one subject at the start of the course. If they do not meet this requirement, they will not participate in Driver's Education during that marking period.

MILITARY SCIENCE

Naval Science I

Naval Science I introduces cadets to the precepts of citizenship, the elements of leadership, and the value of scholarship in attaining life goals. The course is also designed to engender a sound appreciation for the heritage and traditions of the United States of America with focus on the historical significance of sea power. An emphasis on the development, in each Cadet, of a sense of pride in his/her community, school, unit, associates, and self is a predominant theme throughout the course. These elements are developed from a fundamental level. Participation in numerous extra-curricular activities and field trips sponsored by the NJROTC, is highly encouraged.

Naval Science II

Naval Science II builds on the general introduction provided in Naval Science I and further develops the traits of citizenship and leadership in cadets. It will introduce cadets to the technical areas of naval science study and will engender a deeper awareness of the

vital importance of the world oceans to the continued well-being of the United States. Participation in numerous field trips, though not required, is highly encouraged.

Prerequisite course: Naval Science I

Naval Science III

Naval Science III further develops the trait of leadership in cadets and introduces cadets to the vital importance of military justice and international law. Advance instruction in areas of astronomy, meteorology, and navigation skills will compliment instruction in sea power, national security, and naval history. Hands on leadership skills will be developed through cadet involvement in teaching new cadet drill, motivating them in proper uniform care, and managing unit activities. Participation and leadership in extra-curricular activities sponsored by the NJROTC unit, though not required, will be very highly encouraged.

Prerequisite course: Naval Science II

Naval Science IV

Naval Science IV culminates the Naval Science Leadership experience. The course work includes instruction in theoretical and applied aspects of leadership, training, and evaluation of performance. Cadets are taught the techniques to create motivation, to develop goals and activities for a work group, and the proper ways to set a leadership example. The practicum part of the course focuses primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving their leadership skills by putting them in positions of leadership in the NJROTC unit, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. This course is limited to those cadets who have completed the first three Naval Science courses.

Naval Science Drill and Ceremonies

Naval Science D & C is a concurrent course with Naval Science 1 which will provide cadets the opportunity to learn the basics of leadership and discipline as applied to individual and squad military drill and athletic (field day) competitions. The course stresses individual responsibility, teamwork, and high standards of personal conduct and appearance. Military ceremonies; their concept, procedures and implementation; will be taught. Cadets will learn the proper procedures for conducting flag ceremonies, and how to properly display the national colors. Cadets will learn the skills to allow them to participate in unit competition in drill, color guard, honor guard, orienteering, marksmanship, and athletic teams.

Leadership Academy

Naval Science Leadership Seminar provides Cadets with the opportunity to practice the elements of leadership, to expand drill and ceremony skills, and to refine leadership skills. Principles of navigation and basic seamanship will be developed and ethics of leadership will be discussed in seminar discussions of actual leadership dilemmas faced in modern times by junior officers of the armed services. Participation and leadership in extra-curricular activities sponsored by the NJROTC unit, though not required, is very

highly encouraged. In addition, Leadership Academy will prepare qualified cadets to better compete for College and University scholarships, ROTC scholarships and/or Service Academy nominations and appointments.

Here is the course sequence for the new math curriculum:

2017-2018 PROPOSED MATH COURSE SEQUENCE

	NO HS MATH IN MS	ALGEBRA 1 IN MS		ALGEBRA 1 & GEOMETRY IN MS	
9 TH GRADE	FULL YEAR ALGEBRA 1 COURSE (CP LEVEL) 2 CREDIT COURSE – 1 MATH AND 1 ELECTIVE CREDIT	HONORS GEOMETRY 1 CREDIT		HONORS ALGEBRA 2 1 CREDIT	
10 TH GRADE	CP GEOMETRY 1 CREDIT	<i>If they score below a 500 on Math SAT or below 67 on CPAL Placement Test</i> HONORS ALGEBRA 2 1 CREDIT	<i>If they score at least a 500 on Math SAT or at least a 67 on the CPAL placement test</i> DUAL ENROLLMENT DTCC MAT180 COLLEGE ALGEBRA 4 COLLEGE CREDITS	<i>If they score at least a 500 on Math SAT or at least a 67 on the CPAL placement test</i> DUAL ENROLLMENT DTCC MAT180 COLLEGE ALGEBRA 4 COLLEGE CREDITS	<i>If they score a 600 or higher on Math SAT or at least a 63 on the CPCM placement test</i> DUAL ENROLLMENT DTCC MAT 190 COLLEGE PRECALCULUS 4 COLLEGE CREDITS
11 TH GRADE	CP ALGEBRA 2 1 CREDIT	DUAL ENROLLMENT DTCC MAT180 COLLEGE ALGEBRA 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 190 COLLEGE PRECALCULUS 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 190 COLLEGE PRECALCULUS 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 281 COLLEGE CALCULUS 4 COLLEGE CREDITS
12 TH GRADE	CP PRECALCULUS OR COLLEGE MATH (HS LEVEL) BOTH ARE 1 CREDIT	DUAL ENROLLMENT DTCC MAT 190 COLLEGE PRECALCULUS 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 281 COLLEGE CALCULUS 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 281 COLLEGE CALCULUS 4 COLLEGE CREDITS	DUAL ENROLLMENT DTCC MAT 282 COLLEGE CALCULUS II 4 COLLEGE CREDITS