



The Maritime Academy of Toledo

2010-2011 Curriculum Design & High School Course of Study

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Sailing Into the Future --- Powered By Knowledge and Skills



The Maritime Academy of Toledo Mission Statement

The mission of The Maritime Academy is to provide cadets an individualized, standards-based education integrating a marine-focused curriculum and environment, the Marazon Approach, and Ohio's performance standards. The Maritime Academy will enable each cadet to pursue academic excellence and develop positive character traits in an educational environment that supports hands-on, life-based learning, and character formation in a safe, healthy learning environment that supports the needs and interests of each individual cadet.

Our Philosophy

- WE BELIEVE in educating the whole child – academically in the subject areas of art, foreign languages, language arts, math, music, science, social studies, reading, and physical education as well as developmentally across six domains of development: affective, social, creative, cognitive, language, and physical.
- WE BELIEVE every child is entitled to a personal education plan – an individual plan that supports where your child is now and challenges your child to go where your child has yet to go, in his growth, development, and learning.
- WE BELIEVE all children are gifted and all children can learn.
- WE BELIEVE it is the responsibility of adults to support children's learning by seeking out the best methods and resources to meet the needs of the child.
- WE BELIEVE good teaching practices support children's emerging interests, strengths, and talents.
- WE BELIEVE in planning your child's education so as to support your child's interests, needs, and talents.
- WE BELIEVE that it is critical to plan for children's intellectual and personal growth based upon what they already know and can do.

The Marazon Approach for Grades 5-12

The Maritime Academy of Toledo focuses on your child's academic growth as determined by the Ohio Department of Education and your child's developmental growth as determined by The Marazon Approach. The academic focus is on Ohio's K-12 standards and outcomes across traditional subject areas such as math, language arts, science, social studies, etc. The developmental focus of the Marazon Approach supports children's interests, strengths, and needs across six domains: affective, social, creative, cognitive, language, and physical and their specifically related 96 developmental goals. The role of the teacher in a Marazon School is to focus on the development of the whole child as students acquire new skills and concepts.

Teachers and support staff put *The Marazon Approach* into practice using the **Marazon Analytical Database**. The Marazon Database tallies, summaries, analyzes, and reports on each child's progress related to Ohio's standards and outcomes. The Database enables teachers, parents, and administrators to have instant snapshots of each child's progress on a daily, weekly, monthly, quarterly, and annual basis.

Parents take on a very special role in the Marazon Approach. They act as consultants to their child's teacher using **The Parent Handbook of Child Growth, Development, and Learning**. This resource helps parents learn about their child's development and make recommendations about what they want their child's teacher to support in their child.

The Maritime Academy of Toledo Curriculum Focus for Grades 5-12

At The Maritime Academy of Toledo, marine-related themes are integrated into traditional subjects through developmentally appropriate practices (lecture, projects, and hands-on real life experiences) that directly support Ohio Grades 5-12 Outcomes and Standards, Ohio Achievement Tests for Grades 5th -8th, and the Ohio Graduation Test. These themes include but are not limited to the following:

1. Marine Biology
2. Marine Science
3. Environmental Science including Pollution Control
4. Coastline Habitats And Ecosystems and Wildlife Management
5. Meteorology
6. Astronomy
7. GPS - Satellite Communications And Navigation
8. GIS - Chart Mapping And Reading
9. Robotics/Remotely Operated Water Vehicles
10. Coast Guard JROTC and Navy Sea Cadets
11. History of the Great Lakes and Seas
12. Literature of the Great Lakes and Seas
13. Music of the Great Lakes and Seas
14. Healthy Living On/Near The Water
15. Economics of the Great Lakes
16. Marine Art, Architecture, and Woodworking
17. Civilian Marine/Maritime Careers
18. Leisure and Sports
19. Lighthouses and Shipwrecks
11. Internship and Mentorship Programs
21. Marine Culinary Careers
22. Search And Rescue
23. Water Vessels
24. Ports Of Call
25. Bridge Administration
26. Islands, Canals, And Locks
27. Dredging And Channels
28. Rules Of The Road (Sea) and Maritime Law
29. Homeland And Port Security including Local Police, Federal, And Military Service On U.S. Waterways
30. Maritime History Of The State And Region
31. Local, State, Regional And World Cargo / Transportation Systems

The Maritime Academy of Toledo Marine Environment (Workstations and Labs for Grades 5-12)

- Navigation Simulator Lab
- Radar Simulator Lab
- Engine Room Simulator Lab
- Global Positioning System Lab (GPS)
- Geographical Info Lab (GIS)
- Remotely Operated Vehicle Lab (ROV)
- Ecology Lab
- Weather Lab
- Chemistry Lab
- Physics Lab
- Marine Biology Lab
- Fine Art/Sculpting Lab
- Woodwork Lab
- Architecture Lab
- History Workstation
- Library/Resource Workstation
- Music Workstation
- Communications Language Arts Workstation
- Social Studies Workstation



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The Maritime Academy Curriculum Design for Grades 5-8

The Maritime Academy Curriculum Design for grades five through eight incorporates Ohio Outcomes across the following curriculum standards:

THE ARTS

- Dance
- Drama / Theater
- Music / Creative Expression
- Visual Art

MATHEMATICS

- Geometry
- Patterns
- Algebra
- Data Analysis
- Probability
- Measurement
- Numbers

SCIENCE

- Earth Space and Science
- Life Science
- Physical Science
- Scientific Inquiry
- Scientific Ways of Knowing

LANGUAGE ARTS

- Acquisition of Vocabulary
- Reading
- Writing
- Research
- Communications

SOCIAL STUDIES

- History
- People in Societies
- Geography
- Economics
- Government
- Citizenship Rights & Responsibilities

TECHNOLOGY

- Educational Programs
- Data Entry

PHYSICAL EDUCATION

- Health
- Sports

Ohio Achievement Assessments (OAA)

The Ohio Achievement Assessments are annual tests that measure what students know and are able to do in mathematics, reading, science, social studies and writing. These assessments are based on Ohio's Academic Content Standards and thus designed specifically for Ohio students. All 5th-8th grade students at TMAT are required to take these assessments.

OAA Important Dates:

- April 25-29, 2011 OAA Test Prep—Mandatory Attendance
- May 2-13, 2011 Ohio Achievement Tests Administration

For more information about the OAA, including how to interpret your child's score report, please call the school office and/or visit the Ohio Department of Education website:

www.ode.state.oh.us/

The Maritime Academy Curriculum Design for Grades 9-12

The Maritime Academy Curriculum Design for grades nine through twelve incorporates Ohio High School Graduation and Career Tech Education Outcomes. TMAT high school students can choose either to follow one of three program tracks: *The College/Military Academy Preparatory Program*, *The Maritime Academy Career Tech Education Program (MACTEP)*, or *The General Education Program*.

- **The College/Military Academy Preparatory Program** involves a rigorous academic schedule designed to prepare students for acceptance to a four-year college university and/or military academy. Students are expected to complete honors/advanced placement (AP) courses including advanced studies in the area of Mathematics and Science.
- **The Maritime Academy Career Tech Education Program (MACTEP)** is a career preparation program that enables high school graduates to secure entry level positions and/or higher education degrees leading to a merchant marine career. Upon graduation from MACTEP, graduates are able to begin a career on a commercial vessel, be recommended for congressional appointments, combine merchant marine experience with an officer training program, attend two/four year colleges, or attend one of five federally funded state maritime academies for graduate and undergraduate programs leading to licensed mariners careers and/or shore side occupations.
- **The General Education Program** is designed for students who wish meet the Ohio requirements for a high school diploma and are interested in either pursuing a career in a non-marine industry and/or attending a 2-year college upon graduation.

Ohio Graduation Assessment

Beginning with the class of 2007, all TMAT high school cadets **must pass** the Ohio Graduation Test (OGT). The purpose of the OGT is to: ensure that cadets who receive a high school diploma demonstrate at least high school levels of achievement; measure the level of reading, writing, mathematics, science and social studies skills expected of cadets at the end of the 10th grade; and meet federal requirements for high school testing. The test will be given in the spring of the 10th grade year with follow-up sessions each year.

OGT Important Dates:

- | | |
|--------------------------------------|---|
| • October 25-November 5, 2010 | Ohio Graduation Test for 11th & 12th |
| • March 14-25, 2011 | Ohio Graduation Test for 10th Grade |

College Admissions Examination Tests

The ACT® and SAT® are college admissions examinations designed to measure college readiness by assessing high school students' academic aptitude and ability to complete college-level work. We recommend that **all** TMAT high school students take the ACT®, especially those enrolled in *The College/Military Academy Preparatory Program* or *The Maritime Academy Career Tech Education Program (MACTEP)*. Students should also take the SAT® if it is required by the higher education institution they desire to attend. More information about the ACT® and SAT® including registration packets and test dates is available in the principal's office. Students may also visit www.actstudent.org or www.collegeboard.com

ACT® Test Dates in the U.S., U.S. Territories, and Canada

- September 11, 2010
- October 23, 2010
- December 11, 2010
- February 12, 2011
- April 9, 2011
- June 11, 2011

Ohio Department of Education Graduation Requirements

Please note that the below requirements are the ODE minimums for a high school graduation; however, TMAT students are **required** to complete *additional coursework* for graduation from The Maritime Academy of Toledo (see *TMAT Graduation/Degree Requirements*).

Graduation Class Through 2013

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	3 credits
Science	3 credits
Social Studies	3 credits
Physical Education	½ credit
Health	½ credit
Electives	6 credits

Graduation Class 2014 and Beyond

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	4 credits
Science	3 credits
Social Studies	3 credits
Physical Education	½ credit
Health	½ credit
Electives	5 credits

The Maritime Academy of Toledo Graduation/Degree Requirements For Students enrolled in the College/University or General Education Programs

Graduation Class Through 2013

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	4 credits
Science	3 credits
Social Studies	3 credits
Foreign Language	2 credits
Physical Education	½ credit
Health	½ credit
Performing/Fine Arts	1 credit
Technology	1 credit
Intro to Maritime Skills	1 credit
Other Electives	3 credits
TOTAL UNITS NEEDED	23 credits

Graduating Seniors are also required to pass all sections of the OGT and complete a Senior Project (Ethics/Research/Internship) in Language Arts 4.

Graduation Class 2014 and Beyond

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	4 credits
Science	3 credits
Social Studies	3 credits
Foreign Language	2 credits
Physical Education	½ credit
Health	½ credit
Performing/Fine Arts	1 credit
Technology	1 credit
Intro to Maritime Skills	1 credit
Other Electives	3 credits
TOTAL UNITS NEEDED	23 credits

Graduating Seniors are also required to pass all sections of the OGT and complete a Senior Project (Ethics/Research/Internship) in Language Arts 4.

**The Maritime Academy of Toledo Graduation/Degree Requirements
For Students enrolled in Marine Career Tech Education Program (MCTEP)**

Graduation Class Through 2013

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	4 credits
Science	3 credits
Social Studies	3 credits
Physical Education	½ credit
Health	½ credit
Performing/Fine Arts	1 credit
Intro to Maritime Skills	1 credit
Maritime Technology Pathway (Deck or Engine)	8 credits
TOTAL UNITS NEEDED	25 credits

Graduating Seniors are also required to pass all sections of the OGT and complete a Senior Project (Ethics/Research/Internship) in Language Arts 4.

Graduation Class 2014 and Beyond

Curriculum Requirement	Required Credits
English Language Arts	4 credits
Mathematics	4 credits
Science	3 credits
Social Studies	3 credits
Physical Education	½ credit
Health	½ credit
Performing/Fine Arts	1 credit
Intro to Maritime Skills	1 credit
Maritime Technology Pathway (Deck or Engine)	8 credits
TOTAL UNITS NEEDED	25 credits

Graduating Seniors are also required to pass all sections of the OGT and complete a Senior Project (Ethics/Research/Internship) in Language Arts 4.



TMAT Course Planning/Scheduling Procedures



TMAT students should confer with their parents, teachers, school counselor, and/or administrators before choosing an academic program track. Students should consider their present and future goals in addition to assessing their individual capabilities and level of commitment to academic and/or vocational success. Students who choose to switch tracks must fill out a form in the school office and receive approval from the school principal before their classes can be reassigned in the new area, if applicable.

Scheduling Procedures & Adding/Dropping Courses

Students will be scheduled in classes based on their chosen program track and the Ohio/TMAT Graduation/Degree Requirements. Students will receive an *Electives Wish List* in the spring of the preceding school year in order to select which electives they would prefer to take. Student choices will be considered; however, they **are not** guaranteed.

Students may be allowed to drop a course **only within the first five (5) days of a course**. If a student wishes to drop a course, he/she must fill out the appropriate form in the school office, obtain a parent/guardian and teacher signature, and submit the form to the school principal. Final approval and assignment to a new class will be made by the principal. No course changes will be made after the 5th day of a course—**no exceptions**.

The Maritime Academy of Toledo

Suggested Course of Study By Program/Core Subject Area

*College/University Preparatory Program**

General Education Program

Year	ENGLISH—4 CREDITS
1	English 9: World Sea Classics /the Great Lakes Literature
2	English 10: Marine Narratives/ Basic Composition
3	English 11: Environmental Writing
4	English 12: Senior Project
Year	MATHEMATICS—4 CREDITS
1	Math: Algebra I
2	Math: Geometry
3	Math: Algebra II
4	Math: Trigonometry or Calculus
Year	SCIENCE—3 CREDITS
1	Science: Physical or Earth Science
2	Science: Marine Biology
3	Science: Anatomy & Physiology or Chemistry
4	Science: Advanced Chemistry, Physics, or Elective
Year	SOCIAL STUDIES—3 CREDITS
1	Social Studies: World Studies
2	Social Studies: American Studies
3	Social Studies: Economics/Government
4	Social Studies: Geography or Advanced Elective
Year	MARITIME STUDIES—1 CREDIT
1	Intro to Maritime Studies
Year	TECHNOLOGY—1 CREDIT
1	Technology I or Demonstrated Knowledge
Year	PHYSICAL EDUCATION/HEALTH—1 CREDIT
1	Physical Education—Swimming/Fitness Class (.5)
2	Health (.5)
Year	PERFORMING/FINE ARTS—1 CREDIT
2/3/4	Performing/Fine Arts Elective (.5)
2/3/4	Performing/Fine Arts Elective (.5)
Year	FOREIGN LANGUAGE—2 CREDITS
2/3/4	Spanish, French, or American Sign Language
2/3/4	Spanish, French, or American Sign Language

Year	ENGLISH—4 CREDITS
1	English 9: World Sea Classics /the Great Lakes Literature
2	English 10: Marine Narratives/ Basic Composition
3	English 11: Environmental Writing
4	English 12: Senior Project
Year	MATHEMATICS—4 CREDITS
1	Math: Pre-Algebra
2	Math: Algebra I
3	Math: Geometry
4	Math: Algebra II
Year	SCIENCE—3 CREDITS
1	Science: Physical or Earth Science
2	Science: Marine Biology
3	Science: Chemistry, Environmental Science, or Elective
Year	SOCIAL STUDIES—3 CREDITS
1	Social Studies: World Studies
2	Social Studies: American Studies
3	Social Studies: Economics/Government
Year	MARITIME STUDIES—1 CREDIT
1	Intro to Maritime Studies
Year	TECHNOLOGY—1 CREDIT
1	Technology I or Demonstrated Knowledge
Year	PHYSICAL EDUCATION/HEALTH—1 CREDIT
1	Physical Education—Swimming/Fitness Class (.5)
2	Health (.5)
Year	PERFORMING/FINE ARTS—1 CREDIT
2/3/4	Performing/Fine Arts Elective (.5)
2/3/4	Performing/Fine Arts Elective (.5)
Year	FOREIGN LANGUAGE—2 CREDITS
2/3/4	Spanish, French, or American Sign Language
2/3/4	Spanish, French, or American Sign Language

**Classes should be taken at Honors/AP level*

The Maritime Academy of Toledo
Suggested Course of Study By Program/Core Subject Area

Marine Career Tech Education Program

Year	ENGLISH—4 CREDITS
1	English 9: World Sea Classics /the Great Lakes Literature
2	English 10: Marine Narratives/ Basic Composition
3	English 11: Environmental Writing
4	English 12: Senior Project
Year	MATHEMATICS—4 CREDITS
1	Math: Pre-Algebra or Algebra I
2	Math: Algebra I or Geometry
3	Math: Geometry or Algebra II
4	Math: Algebra II, Trigonometry, or Calculus
Year	SCIENCE—3 CREDITS
1	Science: Physical or Earth Science
2	Science: Marine Biology
3	Science: Chemistry, Environmental Science, or Elective
Year	SOCIAL STUDIES—3 CREDITS
1	Social Studies: World Studies
2	Social Studies: American Studies
3	Social Studies: Economics/Government
Year	MARITIME STUDIES—1 CREDIT
1	Intro to Maritime Studies
Year	TECHNOLOGY—1 CREDIT
1	Technology I or Demonstrated Knowledge
Year	PHYSICAL EDUCATION/HEALTH—1 CREDIT
1	Physical Education—Swimming/Fitness Class (.5)
2	Health (.5)
Year	PERFORMING/FINE ARTS—1 CREDIT
2/3/4	Performing/Fine Arts Elective (.5)
2/3/4	Performing/Fine Arts Elective (.5)
Year	MARINE TECH COURSEWORK—8 CREDITS
2	Marine Technology I
3	Vessel Operations or Marine Engineering
3	Marine Field Experience or Advanced Swimming
4	Vessel Operations or Marine Engineering
4	Summer Internship I, II, or Elective

Course Descriptions 2010-2011 School Year

➤ *English Language Arts Department*

Language Arts 9 **Prerequisite: None** **Credit: 1** **Semester: 1st/2nd**

Language Arts 9 is designed to provide students with an understanding of communication skills (*speaking, listening, writing, interpreting visual images*) and their application through the study of various literary genres (*fables, tales, short stories, novels, poetry, and drama*); special emphasis will be placed on *World Sea Classics* and *Great Lakes Literature*. Skill development includes the ability to recognize and decode printed words and apply strategies necessary to comprehend and interpret informational and literary texts. Students will acquire vocabulary through exposure to language-rich texts representing a variety of authors, cultures, and eras. Students will also begin to develop an understanding of the major phases of the writing process, which includes the process of prewriting, drafting, revising and editing and publishing. Students will acquire an understanding of the research process including the ability to locate, select, and make use of relevant information from a variety of media, reference, and technological sources.

Language Arts 10 **Prerequisite: LA 9** **Credit: 1** **Semester: 1st/2nd**

Language Arts 10 builds upon the concepts of Language Arts 9 by extending students' knowledge base through exposure to a broader base of authors and literary genres including the study of *marine-themed narratives*. Students will be provided with more advanced research and writing assignments including opportunities to refine higher order critical thinking skills such as interpretation and analysis. Students will also learn to deliver presentations that effectively convey information and/or persuade or entertain audiences through control of language and deliberate choice of vocabulary to clarify points and adjust presentations according to audience and purpose.

Language Arts 11 **Prerequisite: LA 10** **Credit: 1** **Semester: 1st/2nd**

Language Arts 11 builds upon the concepts of Language Arts 10. Students will focus on American literature and media sources including *fables, tales, short stories, novels, articles, poetry, movies, plays, and drama*; special emphasis will be placed on *environmental issues*. Students will engage in more rigorous discussion and analysis of works including the ability to write and/or deliver presentations that utilize higher-order interpretation, research, and writing skills.

Language Arts 12 **Prerequisite: LA 11** **Credit: 1** **Semester: 1st/2nd**

Language Arts 12 is geared toward preparing students for college-level critical analysis and researched-based writing. Students will engage in activities that require application of an understanding of communication skills learned in the prerequisite courses. Students will focus mainly on British literature and engage in more rigorous discussion and analysis of works including advanced writing and presentation delivery skills that utilize higher-order interpretation, research, and writing skills. *Graduating Seniors must complete a Senior Project.* Students may choose to complete a summer internship or complete an advanced-level research paper focused on either an ethical issue and/or researched topic of interest.

Journalism I **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 1st** *Elective Course*

Journalism I is designed to introduce students to the various types of journalism including reporting, photography, writing, design, broadcast, graphics, and multimedia. Students are exposed to issues concerning professionalism and ethical decision-making. Students are also taught interviewing and newsgathering skills, as well as basic article writing, proofreading, and copyediting skills. Students will also engage in discussion and analysis of journalistic works from a variety of media, reference, and technological sources.

Journalism II **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 2nd** *Elective Course*

Journalism II builds upon the concepts of Journalism I by extending students' knowledge base through the application of learned skills through the production a student publication. Students will also be responsible for all aspects of the journalistic process including reporting, photography, writing, design, broadcasting, graphics, and multimedia usage. Students will also engage in the interviewing and newsgathering process as well as in article proofreading and copyediting.

➤ *Mathematics Department*

Pre-Algebra **Prerequisite: None** **Credit: 1** **Semester: 1st/2nd**

Pre-Algebra is designed to enable students to develop the skills necessary to manipulate numbers, solve equations, and master operations with rational numbers and integers. Students will be introduced to the basic vocabulary of algebra, problem solving methods, and the methods of writing and solving equations. Concepts to be covered include, but are not limited to: variables and finding solutions, computing operations with fractions, solving equations, ratio, inequalities, graphing equations, area and volume, statistics and probability, percentages, graphing linear function, comparing rational numbers with scientific notation, and converting fractional numbers between fractions, decimals, and percents.

Algebra I **Prerequisite: Pre-Algebra** **Credit: 1** **Semester: 1st/2nd**

Algebra I builds upon the concepts of Pre-Algebra by extending student's skill in manipulating numbers, solving Algebraic equations, and mastering operations with rational numbers and integers. Concepts to be covered include, but are not limited to: polynomials, radicals, quadratic equations, two variable equations, linear functions, rational expressions, inequalities, solving quadratic equations, simplifying real number expressions with and without variables, and radicals.

Geometry **Prerequisite: Algebra I** **Credit: 1** **Semester: 1st/2nd**

Geometry is a comprehensive study of geometric concepts including the study of lines, circles, angles, polygons, arcs, solids, and coordinate geometry. Geometry requires higher order thinking skills including that of applying logic, problem solving, and combining geometric concepts with algebraic fundamentals. Concepts to be covered include, but are not limited to: basic elements of geometry, proofs, surface area, volume, quadrilaterals, coordinate planes, and similarity.

Algebra II **Prerequisite: Alg. I and Geo** **Credit: 1** **Semester: 1st/2nd**

Algebra II requires knowledge and application of concepts learned from the prerequisite coursework. Students will engage in more advanced levels of factoring, graphing, ratio, proportion, and variation. Students are expected to solve complex systems of equations, series, and logarithms. Concepts to be covered include, but are not limited to: probability, geometry, systems of equations, functions, exponential and logarithmic functions, radical functions, trigonometry, and statistics.

Pre-Calculus **Prerequisite: Algebra II** **Credit: 1** **Semester: 1st/2nd**

Pre-Calculus is an advanced course designed for college or military-bound students. The course reviews Algebra 2, but focuses mainly on Trigonometry. Topics include vectors, limits, functions, and matrices.

➤ *Science Department*

Physical Science **Prerequisite: None** **Credit: 1** **Semester: 1st/2nd**

Physical Science is an entry level course designed to give students an overview of physical science with an emphasis on the composition of physical systems and the concepts and principles that describe and predict physical interactions and events in the natural world. This includes demonstrating an understanding of the structure and properties of matter, the properties of materials and objects, chemical reactions, and the conservation of matter. Students will also demonstrate an understanding of the historical perspectives, scientific approaches, and emerging scientific issues associated with the physical sciences.

Biology (Marine) **Prerequisite: Sophomore** **Credit: 1** **Semester: 1st/2nd**

Biology is the study of how living systems function and how they interact within the physical environment. Students will also gain an understanding of the characteristics, structure, and function of cells, organisms, and living systems with an emphasis on *marine life*. Students will gain an understanding of the cycling of matter and the flow of energy in living systems. Topics will include, but are not limited to: the principles of heredity, biological evolution, marine ecosystems, ecology, and the diversity and interdependence of life. Students will demonstrate an understanding of different historical perspectives, scientific approaches, and emerging scientific issues associated with the life sciences.

Anatomy & Physiology **Prerequisite: Junior/Senior** **Credit: 1** **Semester: 1st/2nd**

Anatomy and Physiology is a comprehensive study of the structure and functions of the human body. This course is open to juniors and seniors interested in medicine and/or an extensive and detailed study of the numerous organ systems of the human body. Students will gain an understanding of anatomical structures, the physiological interactions of the body, and the application of basic medical terminology and theory. Students will also be working with organ dissection including the systematic dissection of fetal pigs.

Oceanography **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 1st** *Elective Course*

Oceanography is an elective course open to juniors and/or seniors interested in the branch of science dealing with the physical and biological aspects of the world's oceans. Students will gain a scientific, social, and environmental context for current issues concerning the preservation, exploration, and exploitation of ocean resources. Topics will include, but are not limited to: climatology, marine plants and animals, geography and geology of ocean basins, the chemistry of sea water, pollution, waves, shipwrecks, tides, coastal processes, and the biology of diverse ecosystems such as coral reefs.

Limnology **Prerequisite: Senior** **Credit: .5** **Semester: 2nd** *Elective Course*

Limnology is an elective course open to seniors interested in the scientific study of *freshwater bodies* or lakes, rivers, and wetlands. Students will gain an understanding of the biological, chemical, geological, and physical aspects of freshwater bodies. Students will also gain a scientific, social, and environmental context for current issues including how human activities affect lake systems. Activities will include student collection and analysis of water samples for chemical properties, pollutants, and the identification of organisms.

➤ *Social Studies Department*

American Studies **Prerequisite: None** **Credit: 1** **Semester: 1st/2nd**

This entry level course is designed to provide students with a chronological overview of American history. Students will develop an understanding of major U.S. historic eras including, but not limited to: the inception of our nation, the American Revolution, the Constitution, the Civil War, the Great Depression, World War II, the Civil Rights Movement, and the Progressive era at the turn of the twentieth century. Students will focus on developing a greater understanding of their rights and responsibilities as a citizen. Students will also gain a historical, cultural, governmental, economic, environmental, and social context for current global and domestic issues affecting the United States.

World Studies **Prerequisite: Sophomore** **Credit: 1** **Semester: 1st/2nd**

World Studies is a comprehensive examination of major economic, cultural, and political events that shaped the modern Western world. This study of historic eras includes, but is not limited to: Ancient Middle East and Egypt, Ancient Greece and Rome, the Middle Ages, The Renaissance, and Reformation. Students will use higher order thinking skills to: connect their life experience to that of historic figures, interpret significant world events, and analyze historical patterns. Students will also gain an understanding of the interdependence of people and cultures throughout the world and how events in a specific time or geographic time or location can positively or adversely affect the lives of people living in another time and/or geographic location.

Economics **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 1st**

Economics is designed to help students develop fiscal reasoning skills and the ability to make informed choices as producers, consumers, savers, investors, workers and citizens in an interdependent world. Students will engage in learning practical economic skills including how to use and maintaining banking accounts, how to make major purchases,

responsible use of credit cards and loans, acquiring insurance coverage, and paying taxes. Students will also acquire a basic knowledge of the American economic system including the study of capitalism, consumer rights, and economic legislation.

Government **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 2nd**

Government is a junior/senior level course examining the basic purpose, organization, and function of government at the local, state, national, and international level. Emphasis will be placed on the structure of government in the United States including the role and function of the executive, legislative, and judicial branches and the rights and responsibilities of citizens in a free society. Students will also participate in rigorous discussion and analysis of government as structures of power and authority meant to provide order, maintain stability and promote the general welfare of people.

Intro to Psychology **Prerequisite: Senior** **Credit: .5** **Semester: 1st** *Elective Course*

Intro to Psychology is senior level elective course that familiarizes students with the field of *psychology* or the study of human mental processes and behavior. Topics will include, but are not limited to: perception, personality, brain disorders, motivation, emotions, learning, cognition, intelligence, dreams, and psychological disturbances.

World War II **Prerequisite: Senior** **Credit: .5** **Semester: 2nd** *Elective Course*

World War II is a senior level elective examining World War II. Students will develop an understanding of the causes, events, and implications of the global military conflict that lasted from 1939-1945. Students will also participate in rigorous discussion and analysis of the major diplomatic, political, and military events of the war including key political figures.

➤ *Physical Education Department*

SwimFit **Prerequisite: None** **Credit: .5** **Semester: 1st/2nd**

SwimFit is designed to help students develop and maintain a health enhancing level of fitness. In the fitness portion of the course, students will learn and engage in exercises designed to improve their cardiovascular health, muscle definition, and flexibility. Students will acquire an understanding of exercise safety including proper use of equipment and injury prevention and control. The swimming portion of the class will focus on water survival skills and basic swim technique.

Health **Prerequisite: None** **Credit: .5** **Semester: 2nd**

The Health course will focus all aspects of healthy living including nutrition, physical fitness, and responsible choices. Students will understand the psychological, social, and physiological benefits of a healthy, active lifestyle. Topics will also include, but are not limited to: alcohol, tobacco, and drug use, mental and emotional health, environmental health issues, conflict resolution, and prevention of disease and infection.

➤ *Fine Arts Department*

Art **Prerequisite: None** **Credit: .5** **Semester: 1st/2nd**

This course is designed to give students hands-on experiences in a variety of artistic media. Students will engage in a variety of activities including painting, sculpting, and drawing. Students will also develop an historical and social perspective of the role and function of art in past, present, and future cultures.

Music **Prerequisite: None** **Credit: .5** **Semester: 1st/2nd**

This course is designed to give students hands-on experiences in a variety of music media. Students will engage in a variety of activities including composition and performance. Students will also develop an historical and social perspective of the

role and function of music in past, present, and future cultures. Special emphasis will be placed on the music of the *Caribbean* including current popular genres such as reggae, soca, and calypso music featuring the *steel pan drum*.

➤ *Foreign Language Department*

Spanish I **Prerequisite: None** **Credit: .5** **Semester: 1st/2nd**

Spanish I is designed to help students develop the ability to accurately imitate Spanish language sounds through full-emergence oral drill and practice. Students will participate in listening, speaking, reading, and writing activities intended to help them develop the ability to carry on simple conversations and understand basic instructions. Students will also explore Spanish-speaking countries including their history, location, people, and culture.

French I **Prerequisite: None** **Credit: .5** **Semester: 1st/2nd**

French I is designed to help students develop the ability to accurately imitate French language sounds through full-emergence oral drill and practice. Students will participate in listening, speaking, reading, and writing activities intended to help them develop the ability to carry on simple conversations and understand basic instructions. Students will also explore French-speaking countries including their history, location, people, and culture.

➤ *Additional Electives*

Creative Living **Prerequisite: Senior** **Credit: .5** **Semester: 1st/2nd**

Creative Living is a senior level elective course that is intended to enhance students' understanding and application of basic life skills that are essential to living a healthy, productive life. Topics will include, but are not limited to: managing financial resources, effective interpersonal skills, consumer skills, healthy relationships, parenting, and making wise daily choices related to nutrition, housing, and transportation

College Explorations **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 1st**

This course is designed to assist junior/senior students in exploring local and national 2- and 4-year colleges and universities. Students will develop an understanding of the college application process including choosing a school through research and campus visits, taking college admissions examinations (ACT/SAT), filling out applications, and applying for scholarship/grant opportunities. Students will also discuss important issues pertaining to campus life including time management, responsible choices, and increased academic responsibility.

Career Explorations **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 2nd**

This course is designed to assist junior/senior students in making career related choices. Students will discover the various options for employment available with special emphasis on marine-related professions. Students will develop an understanding of the academic and vocational preparation needed to obtain and maintain employment. Students will also engage in mock interviews, resume writing, and rigorous discussion of current events/issues relating to employment/unemployment in the United States.

Drama **Prerequisite: Junior/Senior** **Credit: .5** **Semester: 1st/2nd**

Drama is a junior/senior level course designed to be an overview of the theatre arts. Students will learn about the basic techniques necessary for presenting a dramatic performance. Students will engage in analysis of play structure, develop interpretation skills, and explore theater production. Hands-on activities will include, but are not limited to: dramatic exercises, improvisation, and mini-solo and group performances.

➤ *Marine Technology Department*

Intro to Maritime Studies **Prerequisite: None** **Credit: 1** **Semester: 1st/2nd**

This course is intended to give students a general overview of how people have and continue to interact with the marine environment. Students will examine trends and issues in maritime history including maritime vessels, literature, art, and industry. Students will also develop an understanding of domestic and worldwide marine environmental issues.

Marine Technology I **Prerequisite: MACTEP only** **Credit: 2** **Semester: 1st/2nd (double period)**

This course is only available to students accepted to the MACTEP program. Students will become oriented to the maritime industry and its impact on domestic and foreign economies. Topics will include, but are not limited to: maritime governing bodies, ship and maritime terminology, and educational pathways to maritime careers. Students will also explore specific maritime careers in engineering, vessel operations, shipping, and port authority.

Vessel Operations **Prerequisite: Mar. Tech I** **Credit: 2.5** **Semester: 1st/2nd (double period)**

This course is only available to students accepted to the MACTEP program. Vessel Operations builds upon concepts learned in the prerequisite courses. Topics will include, but are not limited to: seamanship, powerplant systems and components, maritime transportation issues, types of vessels, marine environments, meteorology, marine traffic services and communication, vessel safety, and marine marketing.

Marine Engineering **Prerequisite: Mar. Tech I** **Credit: 2.5** **Semester: 1st/2nd (double period)**

This course is only available to students accepted to the MACTEP program. Marine Engineering builds upon concepts learned in the prerequisite courses. Topics will include, but are not limited to: seamanship, powerplant systems and components, maritime transportation issues, types of vessels, marine environments, meteorology, marine traffic services and communication, vessel safety, and marine marketing.

College/University Preparatory Program Checklist

Cadet Name: _____ Grade: _____ Graduation Year: 20____ Graduation Requirement: 23 Credits

Grade 9

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Physical Education			.5	
Maritime Studies			1	
Technology			1	
Total Credits Earned				

Grade 10

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Performing/Fine Arts			.5	
Health			.5	
Total Credits Earned				

Grade 11

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Foreign Language			1	
Performing/Fine Arts			.5	
Other Elective			1	
Total Credits Earned				

Grade 12

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Foreign Language			1	
Total Credits Earned				

General Education Program Checklist

Cadet Name: _____ Grade: _____ Graduation Year: 20____ Graduation Requirement: 23 Credits

Grade 9

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Physical Education			.5	
Maritime Studies			1	
Technology			1	
Total Credits Earned				

Grade 10

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Performing/Fine Arts			.5	
Health			.5	
Total Credits Earned				

Grade 11

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Foreign Language			1	
Performing/Fine Arts			.5	
Other Elective			1	
Total Credits Earned				

Grade 12

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Foreign Language			1	
Other Elective			1	
Other Elective			1	
Total Credits Earned				

Marine Career Tech Education Program Checklist

Cadet Name: _____ Grade: _____ Graduation Year: 20____ Graduation Requirement: 25 Credits

Grade 9

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Physical Education			.5	
Performing/Fine Arts			.5	
Maritime Studies			1	
Total Credits Earned				

Grade 10

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Performing/Fine Arts			.5	
Health			.5	
Marine Technology I			2	
Total Credits Earned				

Grade 11

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Science			1	
Social Studies			1	
Vessel Operations or Marine Engineering			2.5	
Marine Field Exp. or Advanced Swimming			.5	
Total Credits Earned				

Grade 12

Core Subject Area	Course Name	Year	Credit Needed	Credit Earned
Language Arts			1	
Math			1	
Vessel Operations or Marine Engineering			2.5	
Summer Internship I, II, or an Elective			.5	
Total Credits Earned				