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TOTAL PROGRAM FEATURES

- Research-based, best practices across the curriculum
- Individualized attention and opportunities to collaborate with peers and teachers
- Enrichment opportunities such as local and national internships, international field study, and service-learning opportunities
- Access to a comprehensive Marine Skills program including SCUBA, lifeguard, WSI and CPR certification
- Flexibility to pursue areas of interest and strength
- Rigorous college preparatory and college level courses for all
- Required laboratory science classes and an extensive selection of elective STEM courses
- Scholarship opportunities, including FL Bright Futures
- Ability to earn college credit through AP, AICE, and Dual Enrollment courses
- Ability to compete for admissions to the most elite colleges and universities
- Ability to pursue a Cambridge AICE or AP International Diploma

ADVANCED CURRICULUM OPPORTUNITIES AT MAST

Advanced Placement (AP), Cambridge (AICE) and dual enrollment courses at MAST emphasize and require higher order thinking, strong communication skills in both oral and written presentations, problem solving skills, teamwork and strong investigative/research skills. Highly motivated students who excel academically and are well-rounded in their extracurricular activities will be provided the opportunity to enroll in these courses. All students at MAST are involved in an advanced program of study and are encouraged to develop a strong commitment to social change and civic responsibility. Students emerge as young leaders sensitive to and knowledgeable about the global community.

Students taking a range of advanced academic courses have opportunities to earn an accelerated diploma, receive college credits, and compete for scholarships and admission to the most prestigious colleges worldwide.

MAST ACADEMY LEARNING OUTCOMES

Students will be able to:

- Develop oral, practical, and cognitive skills necessary for evaluating arguments and acquire knowledge
- Think critically, solve problems, interact with colleagues, use technology, and read and write proficiently
- Create real world solutions, using knowledge, critical thinking, and modern technology
- Take an investigative approach to learning and use creativity in solving problems
- Initiate and undertake individual projects and work as part of a team
- Design and implement service-learning projects to work towards solving local, national, or global issues
- Promote understanding and acceptance in an ever-changing global society
- Meet or exceed college-entrance level expectations via AICE, Advanced Placement and dual enrollment programs
- Become eligible for Bright Futures through demonstrated academic merit via test scores and academic performance or the earning of a Cambridge AICE Diploma.
- Articulate their love for learning and how the skills learned will be used to pursue a lifetime of learning.
The Maritime and Science Technology Program at MAST Academy brings together a diverse group of students from all over Miami-Dade County. Its primary focus is the interdisciplinary study of the maritime environment. As part of this rich college preparatory program, students complete advanced studies including college level coursework in the Sciences and Humanities starting as early as Freshman year. All students will complete an Internship experience as part of their program which will be the culmination of their program of study, exposing them to possible careers that they can pursue after graduation.

Minimum Program Requirements

- 4 Years of Math @ MAST Academy to include Geometry, Algebra II, and Pre-Calculus.
- 5 Years of Science @ MAST Academy to include Biology, Chemistry, AS Marine Science, and 1 additional college level science course.
- 4 Years of English @ MAST Academy to include a minimum of one college level English course.
- 3 Years of History @ MAST Academy to include World History, US History, and Government/Economics
- 2 Years of a consecutive foreign language.
- 1 Year of a course meeting the fine art/practical art requirement.
- 4 Maritime Program Courses to include Swimming 1, AS Marine Science, AS Maritime History and Literature.
- Executive Internship to be completed either during the summer or during senior year at the end of the school day. Opportunities may exist for a Dual Enrollment Internship which meets this requirement through the District CTE office.

Sample Schedule

<table>
<thead>
<tr>
<th>Grade</th>
<th>Science</th>
<th>Math</th>
<th>English</th>
<th>History</th>
<th>Magnet Course</th>
<th>Elective</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>H Biology</td>
<td>H Geometry</td>
<td>English 1 H</td>
<td>H World History</td>
<td>Personal Fitness/ Swimming</td>
<td>Engineering 1</td>
<td>Coast Guard JLP 1</td>
</tr>
<tr>
<td>10th</td>
<td>H Chemistry</td>
<td>H Algebra 2</td>
<td>AP English Lang</td>
<td>AP European History</td>
<td>AS Marine Science</td>
<td>French 1</td>
<td>Coast Guard JLP 2</td>
</tr>
<tr>
<td>11th</td>
<td>AP Chemistry</td>
<td>Pre-Calculus</td>
<td>AP English Lit</td>
<td>AP US History</td>
<td>Maritime Humanities (AS Gen)</td>
<td>French 2</td>
<td>Coast Guard JLP 3</td>
</tr>
<tr>
<td>12th</td>
<td>H Physics</td>
<td>H Calculus</td>
<td>DE Lit 1000 &amp; ENG 2012</td>
<td>AP Gov/H Econ</td>
<td>Coast Guard JLP 4</td>
<td>French 3</td>
<td>Internship</td>
</tr>
</tbody>
</table>
The Cambridge STEM Program at MAST Academy prepares students for international studies in the Science, Technology, Engineering, and Math fields. Students in this program will master a broad range of skills and develop the in-depth understanding of a variety of subjects required to earn the internationally recognized Cambridge Advanced International Certificate of Education (AICE) Diploma. Students take advantage of the range of science and technology offerings at MAST to complete introductory college level coursework in the sciences and participate in STEM competitions. Students are expected to take multiple science classes a year as part of this program.

**Minimum Program Requirements**

- 4 Years of Math @ MAST Academy to include Geometry, Algebra II, and Pre-Calculus.
- 5 Years of Science @ MAST Academy to include Biology, Chemistry, AS Environmental Management, and an additional A level science course.
- 4 Years of English @ MAST Academy to include a minimum of one college level English course.
- 3 Years of History @ MAST Academy to include World History, AS United States History, and Government/Economics.
- 2 Years of a consecutive foreign language.
- 1 Year of a course meeting the fine art/practical art requirement.
- 4 Cambridge-STEM Program Courses to include Swimming 1, AS Environmental Management, AS Global Perspectives and A Global Perspectives (Science Research).
- Participation in a minimum of one approved STEM competition while a student at MAST Academy or participate in the Experimental Science class. The approved list includes but is not limited to Vex Robotics Competitions, Fairchild Challenge, SECME Olympiad, Mu Alpha Theta or District Science Fair.

**Sample Schedule**

<table>
<thead>
<tr>
<th>Year</th>
<th>Science</th>
<th>Math</th>
<th>English</th>
<th>History</th>
<th>Magnet Course</th>
<th>Elective</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>H Biology</td>
<td>H Geometry</td>
<td>Pre-AICE English Language</td>
<td>H World History</td>
<td>Personal Fitness</td>
<td>Engineering 1</td>
<td>Coast Guard JLP 1</td>
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<td></td>
<td>Swimming</td>
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<td></td>
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<tr>
<td>10th</td>
<td>H Chemistry</td>
<td>H Algebra 2</td>
<td>AS English Language</td>
<td>AP European History</td>
<td>AS Environmental</td>
<td>French 1</td>
<td>Coast Guard JLP 2</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th</td>
<td>AS Chemistry</td>
<td>Pre-Calculus</td>
<td>AS English Literature</td>
<td>AS US History</td>
<td>AS Global Perspectives</td>
<td>French 2</td>
<td>Coast Guard JLP 3</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th</td>
<td>A Chemistry</td>
<td>AS Mathematics</td>
<td>A English Literature</td>
<td>AP Gov/H Econ</td>
<td>A Global Perspectives (STEM Research)</td>
<td>French 3</td>
<td>Internship</td>
</tr>
<tr>
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</tbody>
</table>
The Cambridge Global Studies Program at MAST Academy prepares students for college level study in the United States or internationally. Students in this program will master a broad range of skills and develop a in-depth understanding of a variety of subjects required to earn the internationally recognized Cambridge Advanced International Certificate of Education (AICE) Diploma. Students complete coursework that broadens their perspective and provides a global lens through which to address the economic and social challenges facing our world. In recognition of the importance of fluency in multiple languages to the global workforce, all students in this program will be required to complete the foreign language component of the Florida Bi-Literacy Seal through examination or coursework while at MAST Academy.

**Minimum Program Requirements**

- 4 Years of Math @ MAST Academy to include Geometry, Algebra II, and Pre-Calculus.
- 5 Years of Science @ MAST Academy to include Biology, Chemistry, AS Environmental Management, and an additional A level science course.
- 4 Years of English @ MAST Academy to include a minimum of one college level English course.
- 4 Years of History @ MAST Academy to include World History, AS United States History, and Government/Economics.
- 2 Years of a consecutive foreign language.
- 4 Cambridge-STEM Program Courses to include Swimming 1, AS Environmental Management, AS Global Perspectives and A Global Perspectives (Science Research).
- Participation in a minimum of one approved STEM competition while a student at MAST Academy or participate in the Experimental Science class. The approved list includes but is not limited to Vex Robotics Competitions, Fairchild Challenge, SECME Olympiad, Mu Alpha Theta or District Science Fair.

**Sample Schedule**

<table>
<thead>
<tr>
<th>9th</th>
<th>Science</th>
<th>Math</th>
<th>English</th>
<th>History</th>
<th>Magnet Course</th>
<th>Elective</th>
<th>Elective</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H Biology</td>
<td>H Geometry</td>
<td>Pre-AICE English Language</td>
<td>AP Human Geography</td>
<td>Personal Fitness/ Swimming</td>
<td>French 1</td>
<td>Art History</td>
</tr>
<tr>
<td>10th</td>
<td>H Chemistry</td>
<td>H Algebra 2</td>
<td>AS English Language</td>
<td>AP World History</td>
<td>AP European History</td>
<td>French 2</td>
<td>Newspaper</td>
</tr>
<tr>
<td></td>
<td>AS Environmental Management</td>
<td>Pre-Calculus</td>
<td>AS English Literature</td>
<td>AS US History</td>
<td>AS Global Perspectives</td>
<td>French 3</td>
<td>Newspaper</td>
</tr>
<tr>
<td>11th</td>
<td>AS Marine Science</td>
<td>AS Mathematics</td>
<td>A English Literature</td>
<td>AP Gov/H Econ</td>
<td>A Global Perspectives (Social Focus)</td>
<td>AS French</td>
<td>Newspaper</td>
</tr>
<tr>
<td>12th</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
DIPLOMA PATHWAYS
BE #GRADTASTIC

SUPERINTENDENT’S DIPLOMA OF DISTINCTION

SCHOLAR DESIGNATION

MERIT DESIGNATION

STANDARD DIPLOMA

SEAL OF BILITERACY

WHICH DIPLOMA ARE YOU?
The Cambridge AICE Diploma offers breadth across the curriculum and depth in selected subjects.

Learners must achieve a minimum of seven credits (including Cambridge International AS Level Global Perspectives & Research) from subject groups 1, 2 and 3 (and optionally Group 4) to be awarded the Diploma. Learners must achieve at least one credit from each of Groups 1, 2 and 3. The remaining credits can come from any of the groups. A maximum of two credits can count from Group 4. A Cambridge International AS Level is awarded one credit, and a Cambridge International A Level is awarded two credits.

Most A Level courses are offered over a span of two years, with testing likewise divided. Students register for the AS Level course and sit for the first set of papers (AS Level) at the end of that 1st year. In the second year, students register for the A Level of that specific subject. At the end of the year, students sit for the additional A Level papers and carry over the grades from their first testing session. Students who successfully complete the A Level receive a total of two points, one at the end of the first year and a second at the end of the second year. In the case of A Level exams offered in one year, students sit for all exam papers at the end of the year and receive the full two credits if successfully passed.
Advanced Academic Options

**DUAL ENROLLMENT**

Dual enrollment allows high school students to earn college or vocational credit toward a postsecondary degree or certificate and credit toward their high school diplomas simultaneously. Students must meet the following eligibility criteria: (a) 3.0 unweighted grade point average (GPA) to enroll in college credit courses, or a 2.0 GPA to enroll in vocational certificate courses, (b) pass the appropriate section of the college placement test (CPT), and (c) meet additional admissions criteria set by the postsecondary institution.

The college courses selected by the student must count toward high school graduation for any of the three graduation options. They may earn bonus points equivalent to those earned in honors or Advanced Placement courses. Approval in advance of course registration is required. Students should check with their counselors for information and approval of dual enrollment courses.

**CAREER PLANNING/COLLEGE ENTRANCE EXAMINATIONS**

In completing their postsecondary education plans, students may find it advisable to complete one or more of the standardized tests listed below which are used for college admissions, career planning, placement in college courses, and/or eligibility for scholarships. Recommended grade levels during which tests should be taken are shown in parenthesis.

1. **ACT** – American College Testing Program, formerly the American College Test (11, 12)
2. **PLAN** – Preliminary ACT (10)
3. **PSAT** – Preliminary Scholarship Aptitude Test (10, 11)
4. **SAT I: Reasoning Test** – formerly the Scholastic Assessment Test (11, 12)
5. **SAT II: Subject Test** – formerly the Scholastic Assessment Test (11, 12)
6. **PERT** – Postsecondary Education Readiness Test (9, 10, 11, or 12)

Students should see members of the Student Services team for further information about the tests that would be most appropriate for meeting their needs. Some tests require the completion and mailing of a registration form several weeks in advance of the test date. These materials are available in the Student Services Department.
Students must understand from the outset that it is a privilege to attend the MAST Academy. Academic achievement and good behavior are expected at all times. Students must maintain a minimum 2.5 grade point average in core courses: Language Arts, Mathematics, Science and Social Studies. In addition, students must abide by the Student Code of Conduct. There are two types of probation: academic and disciplinary.

**ACADEMIC PROBATION**

Students who do not demonstrate acceptable academic efforts after the first quarter will be placed on probation. During that time, the student’s academic performance will be closely monitored, parents contacted, tutoring session will be suggested and appropriate actions taken to help the student stabilize academic performance. Students who do not earn the required 2.5 unweighted GPA in core subjects (excluding course recovery efforts and EOC scores) will be subject to exiting and returning to his/her home school.

**DISCIPLINARY PROBATION**

Due to the high risk factor created by MAST Academy’s proximity to the water, misbehavior will not be tolerated. The safety of students and faculty is paramount. Students who violate the Code of Student Conduct are placed on contract and will be counseled to determine appropriate school placement, including the possibility of returning to the home school. Parents are contacted at the time of the initial violation. Failure to comply with behavior contract will result in placement at the home or alternative school if necessary. Parents are informed in writing of the date for the exit review.

In sum, the school may initiate a transfer if the student does not meet the academic or behavior performance standards of the MAST Academy.
## Engineering & Life Skills Course Descriptions

### ENGINEERING & TECHNOLOGY

**M/J Computer Applications in Business (#8200220 / #8200210):** This course provides comprehensive training in Word, PowerPoint and Outlook leading to Microsoft Office Suite Certification. Students will also develop skills in Excel, coding, keyboarding, internet, and career planning. Instruction and learning activities are provided in a computer lab setting for hands-on experience with equipment, materials and technology. **Paired Semester Courses**

**M/J Computer Science Discoveries (#020000002):** This computer lab-based course introduces students to computer science as a vehicle for problem solving, communication, entertainment, and personal expression utilizing Code.org’s platforms. The course focuses on the visible aspects of computing and encourages students to see where computer science exists around them and how they can engage with it. They develop personal websites with HTML/CSS, and animation, games and apps with Javascript. Students also engage in physical computing with light/sound circuit boards and showcase their technical skills by developing and testing a prototype for an innovative computing device. **Prerequisite:** 7th or 8th Grade **Annual Course**

**M/J Robotics and Python (#900950001):** Exploration into the field of computer science continues with this computer lab-based course. Students learn Python through interactive coding challenges and by building interactive projects and games using variables, loops, conditionals, functions, program design, and game mechanics. Through design and building of VEX IQ robots and coding with RobotC, students enhance their STEM skills and participate in extracurricular competitions throughout the year. Supplemental explorations in computer science and robotics prepare students to continue the track in high school. **Prerequisite:** M/J Computer Science Discoveries. **Annual Course**

**Foundations of Programming, (#900721001):** This course introduces concepts, techniques, and processes associated with computer programming and software development. **Annual Course**

**Engineering I Honors, (#840111001):** This course helps students understand the field of Engineering/Engineering Technology and prepares them for post-secondary Engineering programs by developing a more in-depth mastery of the associated mathematics, science, and technology knowledge and skills. The course also includes essential concepts of technology and design, as well as concerns about the social and political implications of technological change. **Annual Course**

**Engineering II Honors, (#840112001):** The content includes, but is not limited to, a study of the applications of mechanical, fluid, electrical and thermal concepts, computer applications and the technical skills of engineering technology. Instruction will be provided in a laboratory setting using hands-on experiences related to all aspects of engineering. Technological devices will provide students with design, construct and problem-solving experiences. Activities will also include the study of entrepreneurship, work group organization, work breakdown of structures, legal and ethical constraints on the practice of engineering, safety and leadership skills. **Prerequisite:** Engineering I **Annual course**
Engineering III Honors, (#840113001): This course content includes, but is not limited to, a study of the application of mechanical, fluid, electrical and thermal concepts, mathematics, chemistry, physics, computer application, and technical skills of engineering technology. The advanced content and activities will also include the study of entrepreneurship, work group organization, work breakdown structures, legal and ethical constraints on the practice of engineering, safety and leadership skills. Prerequisite: Engineering II, teacher approval required. Annual course

Advanced Technology Applications Honors, (#860190001): The purpose of this course is to provide students with the opportunity to develop a project from “vision to reality”. Working in teams to design engineer, manufacture, construct, test, redesign, test again, and then produce a finished “project”. The student, teacher, and team members must participate in an advanced applications project conference which is essential to designing learning experiences that are appropriate for each individual learning needs and career interests. Prerequisites: Engineering I, II, III, teacher approval required. Annual Course

Advanced Placement Principles of Computer Science, (#020033502): AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science. Annual Course

Advanced Placement Computer Science A, (#020032002): The AP Computer Science A course is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. Annual Course

PHYSICAL EDUCATION

M/J Grade 6 PE & Fitness (#150800001/#150806001): This course is designed for 6th grade students. The purpose of this course is to provide a foundation of knowledge, skills, and values necessary for the development of a physically active lifestyle. The course content provides exposure to a variety of movement opportunities and experiences which includes, but is not limited to: Fitness Activities, Educational Gymnastics and Dance, and Team Sports. This course develops the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. Paired Semester Courses

M/J Grade 7 PE & Team Sports (#150802001/#150807001): This course is designed for 7th grade students. The purpose of this course is to provide a foundation of knowledge, skills, and values necessary for the development of a physically active lifestyle. The course content provides exposure
to a variety of movement opportunities and experiences which includes, but is not limited to: Fitness Activities, Educational Gymnastics and Dance, and Team Sports. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. **Paired Semester Courses**

**M/J Grade 8 Individual & Dual Sports & Outdoor Pursuits, (#150850001/#150830001):** This course is designed for 8th grade students. The purpose of this course is to build on previously acquired knowledge, skills, and values necessary for the implementation and maintenance of a physically active lifestyle. The course content provides exposure to a variety of movement opportunities and experiences which include but is not limited to: Outdoor Pursuits/Aquatics, Individual/Dual Sports and Alternative/Extreme Sports. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle. **Paired Semester Courses**

**Weight Training 1 & Fitness & Lifestyle Design/Yoga, (#150134001/#150131001):** The purpose of this course is to provide students with opportunities to acquire basic knowledge and skills in weight training that maybe used in physical fitness pursuits today as well as in later life, improve muscular strength and endurance, and enhance body image. The content should include, but not be limited to, knowledge of the importance of muscular strength and endurance, knowledge of health problems associated with inadequate levels of muscular strength and endurance, knowledge of skeletal muscles, knowledge and application of biochemical and physiological principles to improve and maintain muscular strength and endurance, knowledge of sound nutritional practices related to weight training, knowledge of safety practices related to weight training, and knowledge of consumer issues related to weight training. **Paired Semester Course**

The content will include, but not be limited to, assessment of the health-related components of physical fitness, further development of knowledge and application of physical fitness concepts, knowledge of designing, implementing, and evaluating a personal fitness program, knowledge of safety practices, and knowledge of consumer issues related to personal fitness programs. The design, implementation, and evaluation of an ongoing personal fitness program should be stressed. **Prerequisite:** Personal Fitness. **Paired Semester Course**

**MARINE SKILLS**

**Personal Fitness and Swimming 1, (#150130001/#FV150446001):** This course provides students with opportunities to develop an individual optimal level of physical fitness, acquire knowledge of physical fitness concepts, and acquire knowledge of the significance of life-style on one’s health and fitness. The content includes knowledge of the importance of physical fitness, assessment of health-related components of physical fitness, knowledge of health problems associated with inadequate fitness levels, health-related components of biomechanical and physiological principles to improve and maintain the health-related components of physical fitness, knowledge of safety practices associated with physical fitness, knowledge of psychological values of physical fitness including stress management, knowledge of sound nutritional practices, and consumer issues related to physical fitness.

Students will have the opportunity to extend the acquisition of knowledge in the development of swimming skills and maintain and/or improve health-related fitness. The content will include the development of swimming strokes levels I, II, and III, knowledge of basic water rescue, community first aid, and CPR. The fundamentals of kayaking will also be taught in this course. Skill acquisition and the maintenance and/or improvement of physical fitness are stressed, as a result each student will
compete in an end of the year triathlon (Run, Swim, Kayak). This course is required for graduation by the State of Florida. **Prerequisite:** None. **Paired Semester Course**

Swimming 2 and Individual & Dual Sports, (#150447001/#150241001): This course provides students with opportunities to extend the acquisition of knowledge in the development of swimming skills and maintain and/or improve health-related fitness. Students will learn strategies of individual and dual sports play, develop skills in individual and dual sports, and/or improve their personal fitness. The content includes knowledge and the application of skills, techniques, strategies, rules, and safety practices necessary to participate in selected individual and dual sports. The course will include basic canoe/kayak and windsurfing and the further development of swimming strokes levels IV and V, knowledge of basic water rescue, community first aid, and CPR. **Prerequisite:** Personal Fitness. & Red Cross Swimming Level IV **Paired Semester Course**

Water Safety, (#150242001/#150449001): This one-semester course provides students with opportunities to acquire knowledge of strategies and develop skills in water safety, selected individual and dual sports, and maintain and/or improve their personal fitness. The content includes the knowledge and application of skills, techniques, strategies, rules and safety practices necessary to participate in selected individual and dual sports. The knowledge and application of personal water safety skills; swimming, non-swimming, and equipment rescues; boating safety and rescues; swimming skills for basic rescues; mask, fin, and snorkel techniques; methods and use of backboard; basic life support techniques, first aid, and the responsibilities of a lifeguard. Lifeguard training will be included in this course. Red Cross certification is an optional fee. This course will also include basic SCUBA. **Prerequisite:** Swimming & Individual and Dual Sports or recommendation from the instructor. A SCUBA certification fee is required. **Paired Semester Course**

Outdoor Education, (#150247001/#150243001): This course provides students with opportunities to extend the acquisition of knowledge in the development of advanced swimming skills and advance open water and deep-water scuba certification. Also included will be advanced life support techniques, first aid, and the responsibilities of a lifeguard. As all students will already be lifeguards, open water training and WSI (water safety instructor) certifications will be given for an additional fee. **Prerequisite:** Basic SCUBA and American Red Cross Lifeguard Certification & Red Cross Swimming Level IV **Paired Semester Course**

**HOSPITALITY & FOOD OPERATIONS**

Culinary Arts I, (#880051002): This course covers the history of the food service industry and careers in that industry. Also covered are state mandated guidelines for food service and how to attain food handler training certification; safety in the workplace; employability skills; leadership/teamwork skills; care and use of commercial culinary equipment; basic food science; basic nutrition; and following recipes in food preparation labs. **Annual Course**

Culinary Arts II, (#880052001): In this course students will learn and perform front-of-the-house and back-of-the-house duties. Students will prepare quality food products and present them creatively; demonstrate safe, sanitary work procedures; understand food science principles related to cooking and baking; and utilize nutrition concepts when planning meals/menus. Students will continue their hands-on training by preparing and serving meals for MAST Academy's Fish Tales Café. **Prerequisite:** Culinary Arts I. **Annual Course**

Culinary Arts III Honors, (#880053002): In this course the student will research career opportunities in professional cooking/baking; follow guidelines on food selection, purchasing, and
storage; and use communication skills. Students will prepare and present a variety of advanced food products; create centerpieces; and research laws specific to the hospitality industry (including handling of alcohol). Also covered are management skills; how to develop a business plan; and utilization of technology in the workplace. Students will be knowledgeable about food safety manager training/certification training programs that are acceptable in Florida. Students will continue their hands-on training by preparing and serving meals for MAST Academy's Fish Tales Café. **Prerequisite:** Culinary Arts II. *Annual Course*

**Culinary Arts IV Honors, (#880054003):** In this course the student will research career opportunities in professional cooking/baking; follow guidelines on food selection, purchasing, and storage; and use communication skills. Students will prepare and present a variety of advanced food products; create centerpieces; and research laws specific to the hospitality industry (including handling of alcohol). Also covered are management skills; how to develop a business plan; and utilization of technology in the workplace. Students will be knowledgeable about food safety manager training/certification training programs that are acceptable in Florida. Students will continue their hands-on training by preparing and serving meals for MAST Academy's Fish Tales Café. **Prerequisite:** Culinary Arts III. *Annual Course*

**UNITED STATES COAST GUARD LEADERSHIP PROGRAM (USCG JLP)**

**Four Year Program Overview:** Coast Guard JROTC provides a forum for the development and application of leadership and teambuilding skills. This is accomplished by enhancing the classroom education with a weekly Leadership Lab. The JROTC cadets are organized into a hierarchical structure where cadets can earn the privilege of moving into regimental leadership positions and assuming responsibility for the development of the cadets subordinate to them.

**Coast Guard Junior Leadership Program I, (#180230001):** This course is an introduction to the USCG and military service in general. It includes an overview USCG history, missions, organization, shipboard and shore station operations, and traditions from its inception to the present. The historical missions segment will reinforce studies in American History from 1790 through modern times, with emphasis being placed on the role of the USCG in armed conflicts involving the United States as well as its seven peacetime missions. **Prerequisite:** None. *Annual Course*

**Coast Guard Junior Leadership Program II, (#180231001):** This course introduces the concepts and basic skills of leadership and management. The emphasis is on time management, project management and interpersonal communication skills. It prepares cadets for entry level leadership positions in the cadet battalion staff. Leadership skills are introduced and practiced using MS1 cadets as trainees. This course also introduces Maritime Science topics that include small boat and ship handling theory, rules of the road, anchor and ground tackle, and basic weather knowledge. This course incorporates the US Coast Guard Auxiliary, Boating Skills and Seamanship (BS&S) Course. **Students completing the BS&S course will also meet the requirements for the Florida Boating Safety Education ID Card. Prerequisite:** Maritime Science I. *Annual Course*

**Coast Guard Junior Leadership Program III, (#180232001):** This course provides in depth study into the art of navigating a vessel on inland, inter-coastal or offshore waters. Cadets will learn to become competent navigators through an in depth study of tides, currents, aids to navigation and the effect of magnet and celestial forces on the earth. Practical navigational skills such as identification and interpretation of lights and buoys, chart reading, conversion of magnetic bearings to true bearings, dead reckoning and relative motion plotting, completion of tide and current tables, and solutions, precision anchoring, and voyage planning will be learned and practiced both in the
classroom and aboard USCG cutters. This unit entails a great deal of review/reinforcement in the area of science. MS3 cadets will be placed in mid-level administrative and operational positions within the JLP battalion and will exercise their leadership skills in the execution of their assigned duties. **Prerequisite:** Maritime Science II. **Annual Course**

Coast Guard Junior Leadership Program IV, (#180233001): This course provides cadets an opportunity for further implementation of leadership, organizational and managerial skills that cadets have learned over the previous three years. MS4s are given the highest levels of responsibility and authority for the management of the entire JLP corps of cadets. The academic portion of the course will include course work related to Motivation and Behavior, Situational Leadership, Communication, Team Building and Group Dynamics. Electronic and Celestial Navigation will be introduced. **Prerequisite:** Maritime Science III. **Annual Course**

### LEADERSHIP & INTERNSHIP

**Leadership Skills, (#240030001):** This course will teach students leadership skills, parliamentary procedure, problem solving/decision-making, communication skills, group dynamics, time and stress management, public speaking, human relations, team building, and other group processes. Specific content includes study in self-understanding and development in such areas as goal setting, self-actualization and assertiveness, and the study of organization theories and management. **Prerequisite:** Recommendation from Director of Student Activities. **Annual Course**

**Executive Internship, (#0500320AY/#0500330AY):** This course provides Seniors with an opportunity to apply technical skills and competencies to real life processes and settings. Students will work five or more hours per week in jobs related to their program of study. Mentors will evaluate the student’s job performance. **Annual Course**
ENGLISH LANGUAGE ARTS

M/J Language Arts 1 Through ESOL, (#100200002): The purpose of this course is to enable middle school students who are native speakers of languages other than English to develop proficient listening, speaking, reading, and writing skills in the English language. Emphasis will be on acquisition of integrated English communication skills in a wide range of content and activities using texts of high complexity to ensure college and career preparation and readiness. Annual Course

M/J Language Arts 1, Advanced, (#100102001): The purpose of this course is to provide grade 6 students, using texts of high complexity, advanced integrated language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness. Honors and Advanced Level Course Note: Academic rigor is more than simply assigning to students a greater quantity of work. Through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted, students are challenged to think and collaborate critically on the content they are learning. Annual Course Honors Equivalent

M/J Language Arts 2 Through ESOL, (#100201002): The purpose of this course is to enable students who are native speakers of languages other than English to develop proficient listening, speaking, reading, and writing skills in the English language. Emphasis will be on acquisition of integrated English communication skills in a wide range of content and activities using texts of high complexity to ensure college and career preparation and readiness. Annual Course

M/J Language Arts 2 Advanced (#100105001): The purpose of this course is to provide grade 7 students, using texts of high complexity, an advanced integrated language arts study in reading, writing, speaking, listening, and language for college and career preparation and readiness. Honors and Advanced Level Course Note: Academic rigor is more than simply assigning to students a greater quantity of work. Through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted, students are challenged to think and collaborate critically on the content they are learning. Annual Course Honors Equivalent

M/J Language Arts 2 Advanced, Gifted, (#100105002): Same as M/J Language Arts 2 Advanced

M/J Language Arts 3 Through ESOL, (#100202002): The purpose of this course is to enable students who are native speakers of languages other than English to develop proficient listening, speaking, reading, and writing skills in the English language. Emphasis will be on acquisition of integrated English communication skills in a wide range of content and activities using texts of high complexity to ensure college and career preparation and readiness. Annual Course

M/J Language Arts 3 Advanced, (#100108001): The purpose of this course is to provide grade 8 students, using texts of high complexity, advanced integrated language arts study in reading, writing,
speaking, listening, and language for college and career preparation and readiness. Honors and Advanced Level Course Note: Academic rigor is more than simply assigning to students a greater quantity of work. Through the application, analysis, evaluation, and creation of complex ideas that are often abstract and multi-faceted, students are challenged to think and collaborate critically on the content they are learning. **Annual Course**

M/J Language Arts 3 Advanced, Gifted, (#100108002): **Same as M/J Language arts 3 Advanced**

**Intensive Language Arts, (#100040001):** The purpose of this course is to provide intensive instruction and practice in reading skills for students two or more years below grade level in reading comprehension. The content should include, but not be limited to, content identified by diagnosis of each students needs for intensive instruction specified in the academic improvement plan and practice in test taking skills and strategies for reading and writing. The course content must reflect appropriate Sunshine State Standards benchmarks. **Annual Course**

**Pre-AICE English Language, (#100156001):** Cambridge IGCSE/Pre-AICE First Language English is designed for learners whose first language is English. Cambridge IGCSE First Language English learners develop the ability to communicate clearly, accurately and effectively in both speech and writing. They learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed. Learners are also encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. Cambridge IGCSE First Language English also develops more general analysis and communication skills such as synthesis, inference, and the ability to order facts and present opinions effectively. **Annual Course**

**Cambridge Pre-AICE Language, Gifted, (#):** Same as Pre-AICE English Language

**English Honors I, (#):** The content should include, but not be limited to, the following: active reading of varied texts for what they say explicitly, as well as the logical inferences that can be drawn; analysis of literature and informational texts from varied literary periods to examine; writing for varied purposes; effective listening, speaking, and viewing strategies with emphasis on the use of evidence to support or refute a claim in multimedia presentations, class discussions, and extended text discussions; collaboration amongst peers. **Annual Course**

**English Honors I, Gifted, (#100132002):** Same as English Honors I

**English Honors II, (#100135001):** This course promotes academic excellence in English Language Arts through the study of world literature and through enriched experience in composition, speech, and listening skills. The content includes instruction in universal themes found in world literature, as well as critical analysis emphasizing the creative, logical and critical aspects of the writing composition, including prewriting, drafting, and revising. The study of language includes usage, mechanics, and other elements of standard written English. Formal and informal speaking opportunities are provided. Vocabulary study focuses on verbal words commonly found on the SAT. **Prerequisite:** English I Honors **Annual Course**

**English Honors III, (#100138001):** This course promotes academic excellence in English Language Arts through enriched experiences in reading, writing, speaking, and listening and to provide instruction in the study of American Literature. The content should include composition instruction with frequent practice in writing multi-paragraph essays in a variety of types, including
documented papers. Literature study should include the written and oral analysis of American literary works representing the ethnic and cultural diversity of the American experience. The study of literature should also include analysis of American dialects as reflected in the literature. Reference skills and methods of summarizing information should be taught in relation to the production of documented papers. Formal and informal oral communication activities should be provided. **Prerequisite:** English II Honors **Annual Course**

**Advanced Placement English Language & Composition, (#100142001):** AP English Language and Composition focuses on developing the skills needed to succeed in a college-level writing course. The course closely follows the curriculum mission described in the *AP English Language and Composition Course Description* published by the College Board. Students will learn to think deeply about the possibilities of language as a persuasive tool and about the dynamic relationship of writer, context, audience, and argument in written, spoken, and visual texts. A major consideration of this course is to prepare students to write effectively and confidently across the curriculum and in their professional and personal lives. Students will engage in the expository, analytical, and argumentative writing that forms the basis of academic and professional communication, as well as the personal and reflective writing that fosters the development of writing skills in all contexts. The twin concerns of honing close analytical reading skills as well as academic writing skills will ensure that students will become more mature and sophisticated consumers and creators of a variety of texts. **Prerequisite:** A or B in English I Honors, Level 4 or 5 on the most recent ELA FSA, and English I Honors teacher recommendation, **Annual Course**

**Advanced Placement English Literature & Composition, (#100143001):** This course involves students in the study and practice of writing and in the study of literature. Students should learn to use the modes of discourse and to recognize the assumptions underlying various rhetorical strategies. Students should also acquire an understanding of the resources of the language and understanding of the writer’s craft. They should develop critical standards for the appreciation of any literary work and increase their sensitivity to literature as shared experience. The content should include that determined by the College Board Advanced Placement Program. **Prerequisite:** A or B in either English II Honors or AP English Language and Composition. **Annual Course**

**Cambridge Pre-AICE Literature, (#100538001):** The course enables learners to read, interpret and evaluate texts through the study of literature in English. Learners develop an understanding of literal meaning, relevant contexts and of the deeper themes or attitudes that may be expressed. Through their studies, they learn to recognize and appreciate the ways in which writers use English to achieve a range of effects, and will be able to present an informed, personal response to the material they have studied. The syllabus also encourages the exploration of wider and universal issues, promoting learners' better understanding of themselves and of the world around them. **Annual Course Honors Equivalent**

**Cambridge AS Level English Language, (#100155001):** Cambridge International AS Level English is designed for learners who can already communicate effectively in English as it may be their first or second language. The Cambridge International AS Level English syllabus enables learners to achieve greater fluency, accuracy and confidence in the language as it is spoken and written, and improve their communication skills. They will learn how to improve their use of English in a variety of situations, understanding how to read texts and other source materials, and how to extract information, initiate conversations and respond to questions both orally and in writing. **Prerequisite:** A or B in English I Honors, Level 4 or 5 on the most recent ELA FSA, and Pre-AICE English Language teacher recommendation, **Annual Course**
Cambridge AS Level English Language/Literature, (#100155501): Language and Literature in English syllabus aims to encourage an appreciation of literature in English - prose, poetry and drama - of different types and from different cultures; and to develop the key skills required to read, analyze and communicate effectively in English.

By studying a range of texts, learners understand more about writers' choices of language, form and structure, and develop their ability to form independent opinions about what they read. Learners also improve their understanding of the English language and how it is used, extending their skills across a range of writing styles, including imaginative, discursive and argumentative.

Cambridge AS Level English Literature, (#100537001): Students will study a range of texts in three main forms: poetry, prose and drama. Texts represent several different periods and cultures. Focus will be on the reading and analysis of texts. Analysis will come in the form of class discussion and multiple short/long papers. Students will learn the skills of effective and appropriate communication. Annual Course

Dual Enrollment: Introduction to Literature, (#LIT100001): Introduces students to the aesthetics and formal elements of literature and methods of interpreting, reflecting on, and thinking critically about the cultural significance of fiction, poetry, and drama. Cambridge Prerequisites: AS Literature, A/B in class and A/B on exam; Maritime Prerequisites: AP Literature, A/B in class and 3 or above on AP Lang or AP Lit exam.

Dual Enrollment: Writing and Rhetoric 2, (#ENC110205): Through a deeper focus on research, writers will hone their abilities to locate, evaluate, and document sources, and to incorporate them smoothly and responsibly into their own writing. Students will learn about primary and secondary research, employing the research methods that best fit their chosen rhetorical purpose and audience. Cambridge Prerequisites: AS Literature, A/B in class and A/B on exam; Maritime Prerequisites: AP Literature, A/B in class and 3 or above on AP Lang or AP Lit exam.

Dual Enrollment: Approaches to Literature, (#ENG201201): Introduces critical approaches to the study of literature. Students will develop a vocabulary for reading, discussing, and writing about a variety of texts. Meets state composition requirement. Prerequisite: A 4 or a 5 on either the AP English Language and Composition Exam or AP English Literature and Composition Exam, and students must have completed AP English Literature and Composition course.

COMMUNICATION ELECTIVES

M/J Creative Writing 1 (#100900001): The purpose of this course is to involve students in the writing process to produce expressive communication. The content should include, but not be limited to, instruction in all aspects of the writing process (prewriting, drafting, revising, editing, and publishing) with emphasis on written expression of personal experiences and feelings. Annual Course

Maritime Literature & History (AS General Paper), (#100940001): In this course students will be exposed to a rich variety of maritime literature. Students will explore the important role the seas have played in historical events across time. Annual Course

Contemporary Literature/Literature & Media, (#102084002/#100535001): In the first half of this course, students will use texts of high complexity, to develop knowledge of contemporary literature through advanced integrated educational experiences of reading, writing, speaking and
listening, and language. Emphasis will be on representative contemporary literature. The second part of this course will enable students to develop knowledge of the narrative parallels between traditional (print) literary texts and 21st century (multimedia in all its digital platforms) texts. Through integrated educational experiences of extensive viewing and reading, writing, speaking, listening, and language, students will study a variety of digital platforms, film, and television, including the use of graphics in these formats. **Annual Course**

**Communications Methodology, Honors, (#100148001):** The purpose of this course is to enable students to highly refine communication and critical-thinking skills important for success in college and career readiness.

**Film, (#010741001):** In this one-credit course, students explore the elements of film and cinematic techniques used by those who create movies. Students study the techniques in film that serve the story and articulate the theme. Students also prepare a comparative for theatre, film, and literature. Public performances may serve as a resource for specific instructional goals. Students may be required to attend or participate in technical work, rehearsals, and/or film production beyond the school day to support, extend, and assess learning in the classroom. **Annual Course**

**AICE Media Studies AS/A, (#110046001/#110047001):** Cambridge International AS and A Level Media Studies offers learners the chance to develop an understanding and appreciation of the place of media in our everyday lives. The syllabus enables learners to take a hands-on approach to the subject.

Through the coursework components - the Foundation Portfolio for AS - they create their own media products from planning through to execution. Learners also consider and analyze examples from existing media, examining production processes and technologies and the effects they achieve.

**AICE Thinking Skills, (#170037201):** The syllabus enables students to develop their ability to analyse unfamiliar problems, devise problem solving strategies, and evaluate the diverse ways a problem may be solved. During a Thinking Skills course, students learn to put their personal views aside in favour of examining and evaluating the evidence. Students learn how to make informed and reasoned decisions and construct evidence-based arguments.

These independent thinking skills build confidence and equip students with a toolkit for tackling complex and unfamiliar subjects, essential for successful progression to higher education or into professional employment.

**Creative Writing 1/2, (#100932002/#100933002):** The purpose of this course is to enable students to develop and use writing and language skills for creative expression in a variety of literary forms. Studying and modeling a variety of genres will be emphasized at this level of creative writing.

**Creative Writing 3, Honors, (#100933102):** The purpose of this course is to enable students to develop and use writing and language skills for creative expression in a variety of literary forms. Studying and modeling a variety of genres will be emphasized at this level of creative writing.

**Creative Writing 4, Honors, (#100933202):** The purpose of this course is to enable students to develop and use writing and language skills for creative expression in a variety of literary forms. Studying and modeling a variety of genres will be emphasized at this level of creative writing.
Newspaper & Yearbook I, (#100630011): This course provides practical experience in news gathering techniques and practice in journalistic writing, as well as opportunities to explore careers in journalism. The content should include training necessary for successful news gathering information and in writing news, sports, feature articles, and editorials. Through various media, students should explore career opportunities in journalistic media should occur within a workshop setting. Various aspects of journalistic production may be taught through workshop experiences and/or simulations. **Prerequisite:** Formal Application Required. Specify Yearbook or Newspaper. **Annual Course**

Newspaper & Yearbook II, (#100632003): This course provides practical experience in news gathering techniques and practice in journalistic writing, as well as opportunities to explore careers in journalism. The content should include training necessary for successful news gathering information and in writing news, sports, feature articles, and editorials. Through various media, students should explore career opportunities in journalistic media should occur within a workshop setting. Various aspects of journalistic production may be taught through workshop experiences and/or simulations. **Prerequisite:** Formal Application Required. Journalism I, “A” or “B” in English & Journalism teachers’ recommendation. Specify Yearbook or Newspaper. **Annual Course**

Newspaper & Yearbook III, (#100633012): This course provides intermediate instruction in writing and production skills related to various journalistic media. The content should include instruction and prewriting, drafting, editing and proof-reading of written work. Organization and management techniques relating to journalistic productions should be stressed, including leadership skills, record-keeping, time management, utilization of personnel, and task organization. Workshop experiences in producing various kinds of journalistic production may be taught through workshop experiences and/or simulations. **Prerequisite:** Formal Application Required. Journalism II, “A” or “B” in English & Journalism teachers’ recommendation. Specify Yearbook or Newspaper. **Annual Course**

Newspaper & Yearbook IV, Local Honors, (#100633012): This course provides advanced instruction in journalistic writing and production techniques. The content should include instruction in writing, designing, and managing journalistic enterprises. The emphasis in the course should be upon implementing students’ creative skills and talents in writing, graphic design and/or photography, and in providing regular practice in management skills and production techniques in printed journalistic media. The course should provide opportunities to develop proficiency in various forms of journalistic writing, through the production of one or more student journalistic projects. Various aspects of journalistic production may be taught through workshop experiences and/or simulations. This course also fulfills the practical arts requirement for graduation. **Prerequisite:** Formal Application Required. Journalism III, “A” or “B” in English and Journalism teachers’ recommendation. Specify Yearbook or Newspaper. **Annual Course**

Debate 1, (#100733001): The purpose of this course is to develop students’ beginning awareness, understanding, and application of language arts as it applies to oral communication concepts and strategies for public debate in a variety of given settings. **Annual Course**

Debate 2, (#100734001): The purpose of this course is to continue to develop students' awareness, understanding, and application of language arts as it applies to oral communication
The purpose of this course is to develop students' enhanced awareness, understanding, and application of language arts as it applies to advanced oral communication concepts and strategies for public debate in a variety of given settings. Some work outside of the regular school day may be required. **Annual Course**

**Debate 3 Honors, (#100735001):** The purpose of this course is to develop students' enhanced awareness, understanding, and application of language arts as it applies to advanced oral communication concepts and strategies for public debate in a variety of given settings. Some work outside of the regular school day may be required. **Annual Course**

**WORLD LANGUAGES**

**Pre-AICE French I, (#070139401):** The purpose of this course is to introduce students to the French language and French speaking cultures and to develop communicative skills. The content includes, but is not limited to, beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing is also included, as well as the fundamentals of grammar and culture. **Annual Course**

**Pre-AICE French II, (#070133001):** This course reinforces the fundamental skills acquired in French I, developing increased listening, speaking, reading, and writing skills as well as cultural awareness. The content includes an expansion of the listening and oral skills previously acquired. Reading and writing receive more emphasis, and students will continue the study of the Francophone world. **Prerequisite:** French I. **Annual Course**

**French III Honors, (#070134001):** This course expands the skills previously acquired. The content includes expansion of vocabulary and conversational skills through discussions based on selected readings and films. The student’s acquisition of grammatical concepts is strengthened by analyzing reading selections. Contemporary vocabulary and current themes relevant to the French speaking world are emphasized. **Prerequisite:** Teacher recommendation. French II. **Annual Course**

**AICE AS French Language & Culture, (#070139301):** This course develops reading and listening comprehension, and emphasizes written and oral fluency in preparation for the AS French Language examination. It is designed for students who have completed at least French III. **Prerequisite:** Teacher Recommendation. **Annual Course**

**AICE A French Language & Culture, (#070139101):** Learners will gain an understanding of how to use the language in a variety of situations. They will be expected to handle texts and other source materials, extracting information in order to respond to specific tasks. Through their studies, learners can expect to achieve greater fluency, accuracy and confidence in the language.

**Pre-AICE German 1, (#070239002):** German 1 introduces students to the target language and its culture. The student will develop communicative skills in all 3 modes of communication and cross-cultural understanding. Emphasis is placed on proficient communication in the language. An introduction to reading and writing is also included as well as culture, connections, comparisons, and communities.

**Pre-AICE German 2, (#070239201):** German 2 reinforces the fundamental skills acquired by the students in German 1. The course develops increased listening, speaking, reading, and writing skills as well as cultural awareness. Specific content to be covered is a continuation of listening and oral skills acquired in German 1. Reading and writing receive more emphasis, while oral communication remains the primary objective. The cultural survey of the target language-speaking people is continued.
Pre-AICE German 3, Honors (#070234001) : German 3 provides mastery and expansion of skills acquired by the students in German 2. Specific content includes, but is not limited to, expansions of vocabulary and conversational skills through discussions of selected readings. Contemporary vocabulary stresses activities which are important to the everyday life of the target language-speaking people.

AICE AS German Language & Culture, (#070239601): This course develops reading and listening comprehension, and emphasizes written and oral fluency in preparation for the AS German Language examination. It is designed for students who have completed at least German III. **Prerequisite:** Teacher Recommendation. **Annual Course**

AICE A German Language & Culture, (#070232001): Learners will gain an understanding of how to use the language in a variety of situations. They will be expected to handle texts and other source materials, extracting information in order to respond to specific tasks. Through their studies, learners can expect to achieve greater fluency, accuracy and confidence in the language. **Annual Course**

**Italian I (#070532001),** The purpose of this course is to introduce students to the Italian language and Italian speaking cultures and to develop communicative skills. The content includes, but is not limited to, beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing is also included, as well as the fundamentals of grammar and culture. **Annual Course**

**Italian II (#070533001),** This course reinforces the fundamental skills acquired in Italian I, developing increased listening, speaking, reading, and writing skills as well as cultural awareness. The content includes an expansion of the listening and oral skills previously acquired. Reading and writing receive more emphasis, and students will continue the study of the Francophone world. **Prerequisite:** Italian I. **Annual Course**

**Spanish I, (#070834001):** This course introduces students to the Spanish language and Hispanic culture and develops communicative skills. The content includes, but is not limited to beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing is also included, as well as fundamentals of grammar and culture. **Prerequisite:** None. **Annual Course**

**Spanish II, (#070835001):** This course reinforces and expands upon the fundamental skills acquired in Spanish I, developing increased listening, speaking, reading, and writing skills as well as cultural awareness. The content includes an expansion of the listening and oral skills previously acquired. Reading and writing receive more emphasis and students will continue the study of the Hispanic world. **Prerequisite:** Spanish I. **Annual Course**

**Spanish III Honors, (#070836001):** This course synthesizes students’ previous study of Spanish and prepares them for advanced level instruction. Through small group discussion, individual student presentations, and analysis of fiction, non-fiction, and films, students use Spanish for: (1) everyday conversation, (2) acquiring new knowledge, and (3) developing an understanding of different cultures. **Prerequisite:** Spanish II for non-native speakers or Spanish I for native speakers or counselor placement. **Annual Course**

**Pre-AICE Spanish I, (#070853201):** This course provides a review of fundamental grammar and culture for students who speak Spanish as a native language, focusing on oral and written
communication free from English interference. The content includes, but is not limited to, the reinforcement of the student’s ability to communicate ideas and feelings, both orally and in writing, and the development of comprehension skills through the study of reading selections. The different cultures of the Spanish-speaking countries are studied. **Annual Course**

**Pre-AICE Spanish II, (#070853401):** This course continues the development of oral and written communication free from English interference. The content emphasizes reading, discussion of literature, and concepts in preparation for the AP Spanish. **Annual Course**

**Pre-AICE Spanish III, (#070853601):** The purpose of this course is to enable students whose heritage language is Spanish to develop, maintain, and enhance proficiency in their heritage language by reinforcing and expanding skills in listening, speaking, reading, and writing, as well as Spanish grammar skills acquired in Spanish for Spanish Speakers 2. Students are exposed to a variety of Spanish literary genres and authors from a variety of cultural authentic sources. Language Arts Standards are also included in this course to enable students to become literate in Spanish and gain a better understanding of the nature of their own language as well as other languages to be acquired.

The course content will continue reflecting the cultural values of Spanish language and societies.

**Advanced Placement Spanish Language, (#070840001):** This course develops reading and listening comprehension and emphasizes written and oral fluency in preparation for the AP Spanish Language examination. It is designed for students who have completed at least French III. **Prerequisite:** Teacher Recommendation. Completion of Spanish SII or Spanish III Honors with a grade of “B” of better. **Annual Course**

**AICE A Level Spanish Language, (#070853001):** Learners will gain an understanding of how to use the language in a variety of situations. They will be expected to handle texts and other source materials, extracting information in order to respond to specific tasks. Through their studies, learners can expect to achieve greater fluency, accuracy and confidence in the language.

**Advanced Placement Spanish Literature, (#070841001):** The purpose of this course is to prepare students to read and analyze representative works of Spanish prose, poetry and drama and to acquire the basic concepts and terminology of textual analysis. The content should include but not be limited to that determined by the Advanced Placement Program. **Prerequisite:** This course is open for 10th graders and on. Spanish I, II, III Honors or Spanish for Spanish Speakers I, II and Advanced Placement Spanish Language with a grade of “B” or better and a passing score. **Annual Course**
MAST Academy follows State of Florida guidelines for our math program. For math course descriptions, resources, and standards, please visit CPALMS.org
SCIENCE COURSES

M/J Science 1 Advanced #200205001: Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Annual Course

M/J Science 2 Advanced #200208001: Laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving, laboratory apparatus and technologies, experimental procedures, and safety procedures are an integral part of this course. The National Science Teachers Association (NSTA) recommends that at the middle school level, all students should have multiple opportunities every week to explore science laboratory investigations (labs). School laboratory investigations are defined by the National Research Council (NRC) as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models (NRC, 2006, p. 3). Laboratory investigations in the middle school classroom should help all students develop a growing understanding of the complexity and ambiguity of empirical work, as well as the skills to calibrate and troubleshoot equipment used to make observations. Learners should understand measurement error; and have the skills to aggregate, interpret, and present the resulting data (NRC 2006, p. 77; NSTA, 2007). Annual Course Honors Equivalent

Physical Science Honors, #200332001: The Cambridge Pre-AICE/IGCSE Physical Science syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. They learn about the basic principles of Physical Science through a mix of theoretical and practical studies. Learners also develop an understanding of the scientific skills essential for further study at Cambridge International AS and A Level, skills which are useful in everyday life. As they progress, learners gain an understanding of how science is studied and practiced and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment. Annual Course Honors Equivalent

M/J Critical Thinking, Problem Solving, and Learning, #170010001: In this course students explore science, technology, engineering, and math all in one curriculum. This course offers an innovative approach to learning in which students use problem solving skills to tackle hands-on-learning activities. They will learn about different careers in the STEM fields. Students in this course will develop critical thinking skills which will benefit the student.

Students will have opportunities to acquire and apply a range of skills, including:

- gathering, synthesizing and communicating information
- collaborating with others to achieve a common outcome
• analyzing and evaluating planning, processes and outcomes

• developing and justifying a line of reasoning

**Biology I, #200031001:** The purpose of this course is to provide students with general exploratory experiences and activities in the fundamental concepts of life. Opportunities to understand the interactions of science with technology and society should be provided. The content should include, but not be limited to, scientific method, laboratory safety and the use of a laboratory apparatus, biochemistry, cell biology, cell reproduction, genetics, biological changes through time, classification and taxonomy, microorganisms and disease, structure and function of plants, structure and function of animals, human anatomy and physiology, and ecological relationships. Laboratory investigations of selected topics in the content which also include the use of scientific method, measurement, laboratory apparatus, and safety are an integral part of the course. Prerequisite: “C” or better in Physical Science. Annual Course

**Biology I Honors, #200032001/Gifted Biology I # 200032002:** The purpose of this course is to provide students with advanced exploratory and inquiry-based experiences and activities in the fundamental concepts of life. The content should include, but not be limited to, scientific method, laboratory safety and the use of a laboratory apparatus, biochemistry, cell biology, cell reproduction, genetics, biological changes through time, classification and taxonomy, microorganisms and disease, structure and function of plants, structure and function of animals, human anatomy and physiology, and ecological relationships. Laboratory investigations of selected topics in the content that also include the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. Prerequisite: “B” or better in Algebra I and in Physical Science. Annual Course

**Advanced Placement Biology I, #200034003:** The purpose of this course is to provide a study of the facts, principles, and processes of biology, and the collection, interpretation, and formulation of hypotheses from available data. The content should include, but not limited to, that determined by the advanced placement program. Laboratory investigations of selected topics in the content that also include the use of scientific methods, measurement, laboratory apparatus and safety are an integral part of the course. Completion of this course precludes the subsequent earning of credit in Biology I or Biology I Honors. Prerequisite: “B” or better in Honors Chemistry and a 4 or 5 on the Biology End of Course Exam. Recommendation from prerequisite course teacher. An AP Biology study guide is required. Annual Course

**AICE Biology AS Level, #200032102:** Cambridge International AICE Level Biology builds on the skills acquired at Cambridge Pre-AICE/ IGCSE/ Honors level. The syllabus includes the main theoretical concepts that are fundamental to the subject, a section on some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination. The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. Concepts include: cellular and molecular biology, biochemical processes, and heredity. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at a university or to follow a career in science. Prerequisite: “B” or better in Honors Chemistry and a 4 or 5 on the Biology End of Course Exam. Recommendation from prerequisite course teacher. Annual Course. Advanced Placement Equivalent.
AICE Biology A Level, #200032302: Cambridge International A Level Biology builds on the skills acquired at Cambridge Pre-AICE/IGCSE/Honors, and the AICE level. The syllabus includes the main theoretical concepts that are fundamental to the subject, a section on some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination. The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. A Level concepts include: biochemical processes, homeostasis, control and coordination, genetics, natural selection, evolution, biodiversity and classification, and applications of biotechnology. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at a university or to follow a career in science. Prerequisite: "B" or better in AICE/AS Biology. Recommendation from prerequisite course teacher. Annual Course. Advanced Placement Equivalent.

Chemistry, #200334001: The purpose of this course is to provide students with the study of the composition, properties, and changes associated with matter. The content should include, but not be limited to, changes of matter, classification and structure of matter, atomic theory and structure, the periodic table, the mole concept, and chemical bonding, chemical formulas, chemical reactions and balanced equations, and chemical history. Laboratory investigations of selected topics in the content, which also includes the use of the scientific method, measurement, laboratory apparatus and safety, are an integral part of the course. Graphing or scientific calculator is required. Prerequisite: Completion of Geometry and Biology (Regular or Honors). Recommendation from prerequisite course teacher. Co-requisite is Alg. II. Annual Course

Chemistry Honors, #200335001: The purpose of this course is to provide students with a rigorous study of the composition, properties and changes associated with matter. The content should include, but not be limited to changes of matter, atomic theory and structure, the periodic table, bonding, formulas and equations, the mole concept, solutions: acids, bases, salts, and chemical history. Laboratory investigations of selected topics in the content which also include the use of the scientific method, measurement, laboratory apparatus and safety are in integral part of the course. Graphing or scientific calculator is required. Prerequisite: “A” or “B” in Honors Biology, or “A” in Regular Biology, and concurrent enrollment in at least Algebra II Honors. Recommendation from prerequisite course teacher. Annual Course

Advanced Placement Chemistry, #200337001: The purpose of this course is to provide a study of the development and application of chemistry principles and concepts. The content should include, but not be limited to, that determined by the Advanced Placement Program. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. A Graphing calculator is required. Prerequisite: “A” or “B” in Honors Biology and Honors Chemistry, and concurrent enrollment in at least Pre-Calculus. Recommendation from chemistry teacher. Annual Course

AICE Chemistry 1 AS/A Level, #200337101 / #200337301: Cambridge International AS Level Chemistry builds on the skills acquired at Cambridge Pre-AICE/IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts that are fundamental to the subject, a section on some current applications of chemistry, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination. The emphasis throughout is on the understanding of concepts and the application of chemistry ideas in novel contexts as well as on the acquisition of
knowledge. The course encourages creative thinking and problem-solving skills that are transferable to any future career path. Cambridge International AS and A Level Chemistry is ideal for learners who want to study chemistry or a wide variety of related subjects at a university or to follow a career in science. **Prerequisite:** A or B in Honors Chemistry. Recommendation from chemistry teacher. **Annual Course**

**Advanced Placement Equivalent**

**Physics I, #200338001:** The purpose of this course is to provide students with an introductory study of the theories and laws governing the interaction of matter, energy, and the forces of nature. The content includes kinematics, dynamics, energy, work and power, gravitation, heat and thermodynamics, waves and sound, oscillations, light, electricity and magnetism, atomic and nuclear physics. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. **Prerequisite:** At least concurrent enrollment in Algebra II or higher, and “C” or higher in Chemistry. **Annual Course**

**Honors Physics I, #200339001:** The purpose of this course is to provide students with a rigorous and challenging introductory study of the theories and laws governing the interaction of matter, energy, and the forces of nature. The content includes kinematics, dynamics, energy, work and power, gravitation, heat and thermodynamics, waves and sound, oscillations, light, electricity and magnetism, atomic and nuclear physics. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. **Prerequisite:** At least concurrent enrollment in Precalculus or higher, and a “B” or higher in Honors Chemistry or an “A” in Regular Chemistry and Biology. Recommendation from prerequisite course teacher is required. **Annual Course**

**Advanced Placement Physics C – Mechanics, #200343004:** This course is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical sciences or engineering. The purpose of this course is to provide students with a study of Classical Mechanics. Topics include: kinematics, Newton’s laws of motion, work, energy and power, circular motion, momentum, rotational motion, oscillations and gravitation. The AP exam includes questions posed in a laboratory or experimental setting. Questions assess understanding of content as well as experimental skills. The exam may also include questions that overlap several major topical areas or questions on miscellaneous topics, such as identification of vectors and scalars, vector mathematics, or graphs of functions. **Prerequisite:** At least concurrent enrollment in Calculus and a “B” in Honors Physics. Recommendation from prerequisite course teacher is required. **Annual Course**

**Advanced Placement Physics C – Electricity and Magnetism, #200342501:** This course is a calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in physical sciences or engineering. The purpose of this course is to explore topics such as electrostatics, conductors, capacitors and dielectrics, electric circuits, magnetic fields, and electromagnetism. Introductory differential and integral calculus is used throughout the course. **Prerequisite:** At least a “B” in a previous calculus course and a passing score of 3 or greater on the Advanced Placement Physics C - Mechanics exam. Recommendation from prerequisite course teacher is required. **Annual Course**

**AICE Marine Science AS / A Level #200251501 / #200253501:** The AS and A Level Marine Science courses provide a coherent and stimulating introduction to the science of the marine environment. The AS Level course focuses on the scientific study of the sea and its ecosystems,
while the A Level course concentrates on human activities that depend on the sea and have an impact on it. **Annual Course. Recommendation from current-year science teacher.**

**Exploration of Solar Energy and Alternatives I (Honors) #200254001:** The main focus of the course is on solar energy and other renewable alternative resources. This integrated science course implements hands-on and minds-on experiences where, through a series of short and long-term experiments and research, students investigate several aspects of solar energy and develop products related to solar heat and solar electricity. Students will also compare other renewable resources and will be able to critically analyze and discuss the intimate relationships between energy, ecology, economy and politics. This course will be a springboard for discussing career opportunities in the domain of alternative energy development and applications to minimize the abuse of the natural resources and the continuous environmental degradation. **Prerequisite:** “B” or better in Physical Science Honors and at least a “B” in Algebra I Honors. **Annual Course**

**Environmental Science, #200134003:** The purpose of this course is to provide the student with the study of man’s interaction with environment. The content should include, but not limited to, forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics, and major forms of energy. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. Precludes earning credit in any other environmental sciences course. **Co-requisite:** “C” or better in Regular Biology. Teacher recommendation required from prerequisite course. **Annual Course**

**Advanced Placement Environmental Science, #200138001:** The purpose of this course is to provide the student with the study of man’s interaction with the environment. The content should include, but not limited to, forms of pollution, conservation, environmental planning and policy, public land usage, population dynamics, and major forms of energy. Laboratory investigations of selected topics in the content that also include the use of the scientific method, measurement, laboratory apparatus and safety are an integral part of the course. Precludes earning credit in any other environmental sciences course. **Prerequisite or Co-requisite:** “B” or better in Honors Chemistry, preference is to have taken Regular Environmental Science. Recommendation from prerequisite course teacher. **Annual Course**

**AICE Environmental Management AS Level, #200138101:** This AS syllabus covers environmental issues and their management, especially the human aspect. Through their studies, learners gain an understanding of environmental resources and their human exploitation, and the goal of sustainable environmental management. Learners also consider a range of case study material which can feature local, regional or global examples. Although Cambridge International AS Level Environmental Management extends and complements the relevant Cambridge A Level and Cambridge IGCSE syllabuses, learners do not need to have studied the subject before starting the course. **Annual Course Advanced Placement Equivalent**

**Experimental Science Honors Levels 1-4, #200234001, #200235003, #200236002, and #200237002:** Experimental Science Honors provides an environment for science students to pursue advanced scientific research and engage in district-initiated STEAM and STEM competitions. Students will focus on the processes of literature review, research, APA writing style, the scientific method, statistics, types of investigations, and a variety of laboratory techniques, with laboratory investigations that include the use of scientific inquiry, research, measurement, problem solving,
laboratory apparatus and technologies, experimental procedures and safety procedures being an integral part of this course. In the advanced Experimental Science courses (II, III, IV), the student will partner with scientists in a collegiate setting to design and complete scientific investigations focused on real-world/immediate impact situations. For students in grades 10-12. Annual Course
Social Studies & Fine Arts Course Descriptions

SOCIAL STUDIES

M/J United States History, Advanced (#200205001): The purpose of this course is to provide students the opportunity to acquire a comprehensive knowledge and understanding of the heritage of the United States and its relationship to the present. The content should include, but not be limited to, the political, economic, technological, and social development of the United States from its historical beginnings to present day. Annual Course Honors Equivalent

M/J United States History, Advanced, Gifted, (#2100020GG): Primary content emphasis for this course pertains to the study of American history from the Exploration and Colonization period to the Reconstruction Period following the Civil War. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the development of the United States and the resulting impact on world history. So that students can clearly see the relationship between cause and effect in historical events, students should have the opportunity to explore those fundamental ideas and events which occurred after Reconstruction. Honors/Advanced courses offer scaffolded learning opportunities for students to develop the critical skills of analysis, synthesis, and evaluation in a more rigorous and reflective academic setting. Students are empowered to perform at higher levels as they engage in the following: analyzing historical documents and supplementary readings, working in the context of thematically categorized information, becoming proficient in note-taking, participating in Socratic seminars/discussions, emphasizing free-response and document-based writing, contrasting opposing viewpoints, solving problems, etc. Students will develop and demonstrate their skills through participation in a capstone and/or extended research-based paper/project (e.g., history fair, participatory citizenship project, mock congressional hearing, projects for competitive evaluation, investment portfolio contests, or other teacher-directed projects). Annual Course

M/J Civics, Advanced, (#210602001): The primary content for the course pertains to the principles, functions, and organization of government; the origins of the American political system; the roles, rights, responsibilities of United States citizens; and methods of active participation in our political system. The course is embedded with strong geographic and economic components to support civic education instruction. Honors/Advanced courses offer scaffolded learning opportunities for students to develop the critical skills of analysis, synthesis, and evaluation in a more rigorous and reflective academic setting. Students are empowered to perform at higher levels as they engage in the following: analyzing historical documents and supplementary readings, working in the context of thematically categorized information, becoming proficient in note-taking, participating in Socratic seminars/discussions, emphasizing free-response and document-based writing, contrasting opposing viewpoints, solving problems, etc. Students will develop and demonstrate their skills through participation in a capstone and/or extended research-based paper/project (e.g., history fair, participatory citizenship project, mock congressional hearing, projects for competitive evaluation, investment portfolio contests, or other teacher-directed projects). Annual Course

M/J World History, Advanced, (#210902501): The primary content for this course pertains to the world’s earliest civilizations to the ancient and classical civilizations of Africa, Asia, and Europe. Students will be exposed to the multiple dynamics of world history including economics, geography,
politics, and religion/philosophy. Students will study methods of historical inquiry and primary and secondary historical documents. Honors/Advanced courses offer scaffolded learning opportunities for students to develop the critical skills of analysis, synthesis, and evaluation in a more rigorous and reflective academic setting. Students are empowered to perform at higher levels as they engage in the following: analyzing historical documents and supplementary readings, working in the context of thematically categorized information, becoming proficient in note-taking, participating in Socratic seminars/discussions, emphasizing free-response and document-based writing, contrasting opposing viewpoints, solving problems, etc. Students will develop and demonstrate their skills through participation in a capstone and/or extended research-based paper/project (e.g., history fair, participatory citizenship project, mock congressional hearing, projects for competitive evaluation, investment portfolio contests, or other teacher-directed projects). **Annual Course**

**World History Honors, (#210932001):** This course provides students the opportunity to acquire a comprehensive understanding of the past in terms of change or process as related to the development of humanity. This is done by analyzing the political, economic, social, religious, military, dynastic, scientific, and cultural events that have shaped and molded humanity. Implicit in this is an understanding of the historical method, the inquiry process, historical reasoning, and the issues of external/internal validity. Specific content includes comparative views of history, the origin of development of contrasting civilizations, and analysis of cultural universals, the role of religion in historical change, the varieties of contrasting political theories and philosophies, the role of science practices in the world, an analysis of the influence of the major figures and events, interpretations concerning the historical development of the world. Included will be a study of Americanism vs. Communism in accordance with Florida Statue 233.064. Credit and enrollment for Honors World History requires that the student be responsible for all regularly assigned work. **Annual Course**

**Advanced Placement Human Geography, (#210340002):** This course teaches high school students the curricular equivalent of an introductory college-level course in human geography or cultural geography. The course’s content is presented thematically rather than regionally and is organized around the discipline’s main subfields: economic geography, cultural geography, political geography, agricultural geography, and urban geography. The approach is spatial and problem oriented. Case studies are drawn from all world regions, with an emphasis on understanding the world in which we live today. Historical information serves to enrich analysis of the impacts of phenomena such as globalization, colonialism, and the interactions between humans and the environment. **Prerequisite:** The student must have scored a 4 or a 5 on the most recent ELA FSA exam. An “A” or “B” in their current year English and World History class is also required. **Annual Course**

**Advanced Placement European History, (#210938004):** This course is designed to be the equivalent of a two-semester introductory college or university European history course. In AP European History, students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity. **Annual Course**
Advanced Placement World History, (#210942001): This course examines world history from c.1200 to the present and is the equivalent of two semester college courses. Students will explore the rise, fall, and interactions of regional and global civilizations through five course themes: social, political, economic, culture, and the environment. In addition, the course teaches important historical thinking skills such as change and continuity, cause and effect, and periodization to help frame an understanding of historical problems, processes, and chronology. Through the course themes and thinking skills, the student will be able demonstrate a sophisticated understanding of important global paradigm shifts such as the rise of Islamic civilizations, the Age of Exploration, imperialism, and the world wars through source based writing using primary and secondary historical texts, and synthesizing these into a thesis. Prerequisite: “A” or “B” in current year English and current social studies course. Annual Course

United States History, Honors, (#210032001): This course consists of the following content area strands: United States History, Geography, and Humanities. The primary content emphasis for this course pertains to the study of United States history from Reconstruction to the present day. Students will be exposed to the historical, geographic, political, economic, and sociological events which influenced the development of the United States and the resulting impact on world history. So that students can clearly see the relationship between cause and effect in historical events, students should have the opportunity to review those fundamental ideas and events which occurred before the end of the Reconstruction. Prerequisite: “A” or “B” in current year English and World History. Annual Course

Advanced Placement United States History, (#210033001): This course provides students with the opportunity to develop analytic skills and factual knowledge necessary to deal critically with the problems, content, and materials of American historic development. This is done by focusing on persistent themes and change in history and by applying historical reasoning to seek solutions to contemporary problems. Appropriate concepts and skills will be developed in connection with the content that follows. The content should include that determined by the College Board advanced placement program. Prerequisite: “A” or “B” in current year English and World History. Annual Course

AICE US History AS, (#210050001): Students will learn about the expansion of US power from the 1840s to the outbreak of WWII. AICE United States History will focus on domestic and foreign developments, US society, economics and politics. This course will emphasize historical practice, process and thinking skills. Annual Course Advanced Placement Equivalent

AICE US History, A Level, (#210050501): Students should be able to, after completion of the year long course, gain a greater knowledge and understanding of historical periods or themes and a greater awareness of historical concepts such as cause and effect, similarity and differences, and change and continuity. Students will do this by exploring a variety of approaches to different aspects of history and different interpretations of particular historical issues. The curriculum is divided into themes that span from the dates 1941-1990. Prerequisite: The student must have the approval of their current U.S. History teacher to take the course. The student must also have taken either AP U.S. History or Cambridge AS Level U.S. History. Annual Course Advanced Placement Equivalent

United States Government Honors, (#210632001): This course provides students with the opportunity to acquire a comprehensive understanding of American Government and political behavior. The content should include an analysis of those documents which shape our political traditions (the Declaration of Independent, the Constitution, and the Bill of Rights), a comparison of
the roles of the three branches of government at the local, state, and national levels, an understanding of the evolving role of political parties and interest groups in determining policy, how the rights and responsibilities of citizens in a democratic state have evolved and had been interrupted, and the importance of civic participation in the democratic political process. This is a semester course paired with economics. Prerequisite: “A” or “B” in American History honors or an “A” or “B” in AP American History, an “A” or “B” in English Honors or AP English, and the recommendation from those teachers. Semester Course

Economics Honors, (#210234501): This course provides students the opportunity to acquire a comprehensive understanding of how society organizes and utilizes its limited resources to satisfy unlimited wants. Students examine and analyze the implications of market solutions and public policy decisions related to analyzing the role and impact of economic wants, productive resources, scarcity choices, opportunity costs and trade-offs, economic incentives, specialization, comparative advantage, division of labor, interdependence, how a market fails, savings and investment, government and governmental policy, money and financial institutions, labor supply and demand, the distinction between micro socioeconomic goals, freedom, economic efficiency, equity, full employment, stability and growth. This is a semester course paired with American Government Honors. Prerequisite: Same as American Government Honors. Semester Course

Advanced Placement United States Government and Politics, (#210642001): The purpose of this course is to provide students with the opportunity to acquire a comprehensive understanding of American government and political behavior. Specific content to be covered will include, but not be limited to, an evaluation of those documents which shape our political traditions (the Declaration of Independence, the Constitution, and the Bill of Rights), an analysis of the roles of the three branches of government at the local, state, and national levels, a comparative view of the changing nature of political parties and interest groups over time in determining government policy, an evaluation of the changing nature of citizen rights and responsibilities in a democratic state, and the importance of civic participation in the democratic political process. Completion of credit in this course precludes the subsequent earning of credit in American Government, American Government Honors, or American Government Honors Gifted. Semester Course

Advanced Placement Macroeconomics, (#210237001): Explore the principles of economics that apply to an economic system as a whole. You’ll use graphs, charts, and data to analyze, describe, and explain economic concepts. Prerequisite: Teacher Recommendation. Semester Course

AICE, Global Perspectives, AS Level, (#170036401): Cambridge International AS Level Global Perspectives prepares learners for positive engagement with our rapidly changing world. Learners broaden their outlook through the critical analysis of and reflection on issues of global significance. The Cambridge International AS Level Global Perspectives syllabus is based on skills rather than on specific content. Learners develop research, thinking, reasoning and communication skills by following an approach to analyzing and evaluating arguments and perspectives called the Critical Path. The skills gained through study of Cambridge International AS Level Global Perspectives enable students to meet the demands of twenty first century learning and make a successful transition to study in higher education. Annual Course Advanced Placement Equivalent

AICE International History, AS Level, (#210049001): Cambridge International AS and A Level History is a flexible and wide-ranging syllabus covering modern history in the nineteenth and twentieth centuries. The syllabus builds upon skills gained at Cambridge IGCSE or Cambridge O Level and develops lifelong skills including understanding issues and themes within a historical period. The emphasis is on both historical knowledge and on the skills required for historical
research. Learners develop an understanding of cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. At AS level, learners can select from topics on European, American or International history. **Annual Course Advanced Placement Equivalent**

**AICE AS Level Psychology, (#210736001):** Learners will explore the ways in which psychology is conducted. Students will review important research; this approach provides an insight into the ways in which psychology has been applied and leads to an enhanced understanding of key themes and issues. The syllabus reflects the five core areas of psychology: social, physiological, developmental and the psychology of individual differences; it also relates psychology to education, health, organizations, the environment and abnormality. **Annual Course**

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**FINE & PERFORMING ARTS**

**M/J Art in World Cultures, (#010007001):** Students explore art from around the world through project-based activities. Based on directed investigation, students reinterpret selected forms to promote understanding of themes, purposes, symbolism, and traditional formal characteristics. Students compare various cultural responses in art to universal themes, gaining respect for diverse perspectives and the rich heritage shared by cultures from around the world. Supporting geographic, cultural and societal studies, and historical context help students refine their understandings of time and place in global cultures. Students consider the value of preserving these works in today's museums and other public buildings, private collections, and in digital format for sharing and study via the Internet. This course incorporates hands-on activities and consumption of art materials. **Semester Course**

**M/J Exploring Two-Dimensional Art, (#010100502):** Students investigate a wide range of media and techniques, from both an historical and contemporary perspective, as they engage in the art-making processes of creating two-dimensional works, which may include drawing, painting, printmaking, and/or collage. Student artists reflect on their own artwork and that of others through critical analysis to achieve artistic goals related to craftsmanship, technique, and application of 21st-century skills. Opportunities are provided for creative decision-making in the context of the structural elements of art and the organizational principles of design. This course incorporates hands-on activities and consumption of art materials. **Semester Course**

**M/J Intro to Art History, (#010006001):** Students take an inquiry-based approach to exploring, researching, and analyzing works of art across time and cultures. Through the study of art exemplars and project-based activities, students learn to identify the functions, forms, media, styles of art, cultural ideas, and themes related to a variety of time periods and geographical places, and will express their own interpretations in a variety of ways. The course lays a foundation for the art criticism process, examining and comparing how artists have solved visual problems and made meaning across time, place, and culture. Career options related to art history and criticism are also explored. This course incorporates hands-on activities and consumption of art materials. **Annual Course**

**M/J Two-Dimensional Studio Art 1, (#010101001):** Students explore media and techniques used to create a variety of 2-D artworks through developing skills in drawing, painting, printmaking, and collage. Students practice, sketch, and manipulate the structural elements of art. Investigation of artworks from Western and non-Western cultures provide a means for students to expand their understanding and appreciation of the role of art in global culture. Student artists use an art criticism
process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials. **Annual Course**

**M/J Grade 8 Art, (#010102501):** Students explore media and techniques used to create a variety of 2-D artworks through developing skills in drawing, painting, printmaking, and collage. Students practice, sketch, and manipulate the structural elements of art. Investigation of artworks from Western and non-Western cultures provide a means for students to expand their understanding and appreciation of the role of art in global culture. Student artists use an art criticism process to evaluate, explain, and measure artistic growth in personal or group works. This course incorporates hands-on activities and consumption of art materials. **Annual Course**

**M/J Steel Pan Band, (#130208002):** Students in this entry-level class focus on the development of musical and technical skills on a specific instrument or voice through etudes, scales, and selected music literature. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Annual Course**

**Art Appreciation/Drawing 1 (#010434001):** Students experiment with the media and techniques used to create a variety of two-dimensional (2-D) artworks through the development of skills in drawing. Students practice, sketch, and manipulate the structural elements of art to improve mark making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials. **Annual Course**

**Art History 2, (#010435001):** Students develop and refine technical skills and create 2-D compositions with a variety of media in drawing. Student artists sketch, manipulate, and refine the structural elements of art to improve mark-making and/or the organizational principles of design in a composition from observation, research, and/or imagination. Through the critique process, students evaluate and respond to their own work and that of their peers. This course incorporates hands-on activities and consumption of art materials. **Annual Course**

**AP Studio Art (#010935001):** Develop your skills in a two-dimensional medium such as graphic design, photography, collage, printmaking, and others as you learn the principles of 2-D design. You’ll create artwork that reflects your own ideas and skills and what you’ve learned. **Annual Course**

**Music Ensemble 1, (#130540001):** Students with little or no experience in a vocal or instrumental ensemble develop basic musicianship and ensemble performance skills through the study of basic, high-quality music in diverse styles. Student musicians focus on building foundational music techniques, music literacy, listening skills, and aesthetic awareness. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. **Annual Course**

**Music Ensemble 2, (#130541001):** Students with previous vocal or instrumental ensemble experience continue building musicianship and performance skills through the study of high-quality
music in diverse styles. Student musicians learn to self-assess and collaborate as they rehearse, perform, and study relevant musical styles and time periods. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. Annual Course

Music Ensemble 3, (#130542001): Students strengthen vocal or instrumental ensemble performance skills, music literacy, and analytical skills through the study of high-quality music in diverse styles. Student musicians learn to self-assess and collaborate as they rehearse, perform, and study relevant history and cultures. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. Annual Course

Music Ensemble 4 Honors, (#130543001): Students with extensive vocal or instrumental ensemble experience refine their critical listening, music literacy, and ensemble skills through the study, rehearsal, and performance of high-quality, advanced literature. Students use reflection and problem-solving skills with increasing independence to improve their performance and musical expressivity. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. This course, if used for an instrumental ensemble, may also require students to obtain a musical instrument (e.g., borrow, rent, purchase) from an outside source. Annual Course

Chorus 1, (#130330001): This annual, entry-level class, designed for students with little or no choral experience, promotes the enjoyment and appreciation of music through performance of beginning choral repertoire from a variety of times and places. Rehearsals focus on the development of critical listening skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances. Annual Course

Chorus 2, (#130331001): This annual, beginning-level class, designed for students with one year of experience or less in a choral performing group, promotes the enjoyment and appreciation of music through performance of basic, high-quality choral music. Rehearsals focus on the development of critical listening/aural skills; foundational instrumental technique and skills, music literacy, and ensemble skills; and aesthetic musical awareness culminating in periodic public performances. Annual Course

Chorus 3, (#130332001): This annual, formative class, designed for students with previous participation in a school chorus who have basic knowledge of note-reading and vocal technique, concentrates on providing students opportunities to strengthen existing skills in critical listening, vocal techniques, and ensemble performance using high-quality three- and four-part choral literature. Rehearsals focus on gaining independence in music literacy and aesthetic engagement through critical listening and thinking skills. Annual Course

Chorus 4, (#130333001): This annual, intermediate-level class is designed for students with previous participation in a high school chorus and moderate skills in critical listening, vocal techniques, music literacy, and choral performance. Rehearsals focus on enhancing these skills and
students’ aesthetic engagement with music through a variety of high-quality three- and four-part choral literature, providing students with the means to learn how to reflect and use a combination of analytical, assessment, and problem-solving skills consistently to improve their own and others’ performance. **Annual Course**

**Musical Theatre 1, (#040070001):** Students’ course work focuses on, but is not limited to, acting, vocal performance, dance, non-dance movement, and staging, which transfer readily to performances in musicals and other venues. Students survey the evolution of music in theatre from ancient Greece to modern Broadway through a humanities approach and representative literature. Music theatre students explore the unique staging and technical demands of musicals in contrast to non-musical plays. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Annual Course**

**Musical Theatre 2, (#040071001):** Students learn from the styles and techniques used by well-known singer-actor-dancers and choreographers to build a performance portfolio for auditions and/or interviews. Students examine the contributions of major writers, composers, lyricists, and choreographers of musical theatre and learn to analyze the structures, stories, and settings of musical theatre exemplars to understand how those components serve the story and concept. Students extend their dance and movement techniques required to sing and dance at the same time. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Pre-requisite: Drama or Musical Theatre 1. Annual Course**

**Musical Theatre 3, (#040072001):** Students refine their audition techniques and performance/audition portfolio, and consider the contributions of musical theatre in the community and beyond. Students select a number of pieces to showcase their abilities and become conversant about individuals who, currently and in the past, are considered major contributors to the field. Students refine their dance and movement techniques required to sing and dance for long periods of time in rehearsals and performance. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Pre-requisite: Drama or Musical Theatre 2. Annual Course**

**Musical Theatre 4, Honors, (#130347001):** Students with extensive vocal ensemble experience refine their critical listening, music literacy, and ensemble skills through the study, rehearsal, and performance of high-quality, advanced literature. Students use reflection and problem-solving skills with increasing independence to improve their performance and musical expressivity. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Annual Course**

**Steel Pan Band 1, (#130550001):** Students in this entry-level class focus on the development of musical and technical skills on a specific instrument or voice through etudes, scales, and selected music literature. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. **Annual Course**
Steel Pan Band 2, (#130551001): Students in this novice-level class continue to develop musical and technical skills on a specific instrument or voice through developmentally appropriate solo literature, etudes, scales, and exercises. Through problem-solving, critical thinking, and reflection, students develop the physical and cognitive skills necessary to be more disciplined performers. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. Annual Course

Steel Pan Band 3, (#130552001): Students in this intermediate-level class develop their musical and technical skills further on a specific instrument or voice, and expand their technical and performance skills, enhanced by historical and cultural background knowledge of the music. Students explore more demanding solo literature, etudes, and technical exercises with increasing independence. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. Annual Course

Steel Pan Band 4 Honors, (#130553001): Students in this advanced class refine their musicianship and performance skills on a specified instrument or voice. Students prepare for post-secondary and community music experiences and develop artistry independently through a variety of advanced solos, etudes, and excerpts. Public performances may serve as a culmination of specific instructional goals. Students may be required to attend and/or participate in rehearsals and performances outside the school day to support, extend, and assess learning in the classroom. Annual Course
SCIENCE COURSE SEQUENCE – CAMBRIDGE STEM

Required
- Biology (R or H)

Required
- AS Environmental Management (Required Sophomore Year)
- Chemistry (R or H)

Science Electives
- AS Marine Science (can be taken concurrently with chemistry)
- AS Chemistry (Prereq: A or B in Honors Chemistry)
- AS Biology (Prereq: A or B in Honors Chemistry and 4 or 5 on Biology EOC)
- Physics (R or H) (concurrent enrollment in Pre-Calculus required for Honors)

Science Electives
- A Marine Science
- A Chemistry
- A Biology
- AP Physics C

Science Electives Open to All Students
- AP Physics C - E&M
- Experimental Science 1-4 (Level 2 not open to Seniors)
- Environmental Science (can not be taken if AS/AP has been taken)
- Solar Energy Honors (can not be taken if AS/AP has been taken)
SCIENCE COURSE SEQUENCE – MARITIME

Required

Biology (R or H)

Chemistry (R or H)

AS Marine Science (Required Soph. Year - can be taken with chemistry)

A Marine Science

AP Biology (Prereq: A or B in Honors Chemistry and 4 or 5 on Biology EOC)

AP Chemistry (Prereq: A or B in Honors Chemistry)

Physics (R or H) concurrent enrollment in Pre-Calculus required for Honors)

AS Environmental Management (can be taken concurrently with chemistry)

AP Environmental Science (can be taken concurrently with chemistry)

Required

Science Electives

AP Physics C

AP Physics C - E & M

Experimental Science 1-4 (Level 1 not open to Seniors)

Environmental Science (can not be taken if AS/AP has been taken)

Solar Energy Honors (not open to freshman)

Science Electives Open to All Students

AP Biology (Prereq: A or B in Honors Chemistry and 4 or 5 on Biology EOC)

AP Chemistry (Prereq: A or B in Honors Chemistry)

Physics (R or H) concurrent enrollment in Pre-Calculus required for Honors)

AS Environmental Management (can be taken concurrently with chemistry)

AP Environmental Science (can be taken concurrently with chemistry)
MATHEMATICS COURSE SEQUENCE

*Teacher Recommendation Required