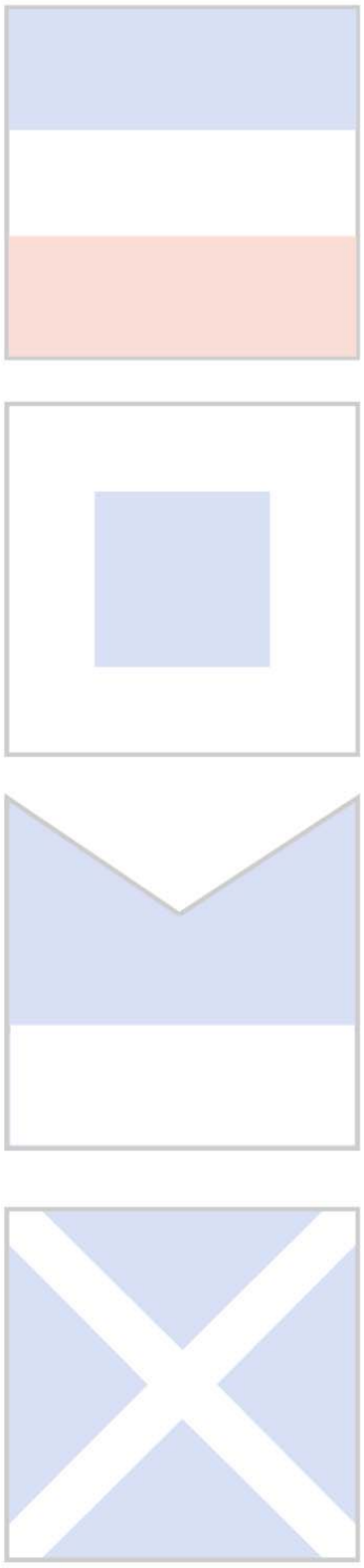

MAST ACADEMY

CURRICULUM BULLETIN

2009 – 2010

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MAST Academy

MARITIME AND SCIENCE TECHNOLOGY HIGH SCHOOL

A Nationally Recognized School of Excellence

Miami-Dade County Public Schools
Mr. Alberto M. Carvalho
Superintendent

Mr. Thomas C. Fisher II
Principal

February 2009

Dear MAST Students and Families,

MAST Academy, a nationally recognized school of excellence, provides students with the highest quality education possible. The *2009-2010 Curriculum Bulletin* will enable you to familiarize yourself with the school's academic program for the coming school year. As you review MAST's curriculum options, please note that we offer a full complement of courses designed to meet the academic needs of all students. MAST Academy course offerings reflect the marine theme of the school and provide expanded elective options to maximize students' educational experiences. We are pleased to offer an array of dual enrollment courses and a full Advanced Placement program, as well as the opportunity to register for on-line courses through the Florida Virtual School and Miami-Dade Virtual School.

MAST students enroll in seven courses instead of six; homework is plentiful; time management and good study skills are essential. Seniors, juniors, and sophomores must consult the requirements for their MAST major before making final course selections. Freshmen have the opportunity to experience the many academic and elective facets of the school before they decide on one of the three MAST majors the end of the ninth grade. *Note that in 2009-2010, internships are required of all seniors*. If you complete this requirement during the 2009 summer session, you must make another elective choice during the regular school year.

As you progress through your studies at MAST, keep your college and career plans continually in focus. We encourage you to study this bulletin carefully and select courses only after careful reflection of your ultimate goals. Be sure to consider course workloads and be pragmatic.

As you make your decisions, counselors, teachers, and administrators will be available to answer questions and provide guidance. All of us at MAST Academy look forward to working with you in the 2009-2010 school year.

Yours in education,

Thomas C. Fisher II

MAST Academy
2009-2010 CURRICULUM BULLETIN

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ABOUT MAST Academy

MISSION STATEMENT

MAST Academy provides a marine setting and nurturing environment for studies leading to academic success, career preparation, an appreciation of the sea and environmental awareness. Stakeholders work together to instill a commitment to life-long learning and to advance and improve a challenging curriculum integrated with the sciences and technology.

BELIEFS

We at MAST Academy believe that:

- Curriculum, instructional practices, and assessments must incorporate a variety of learning activities and opportunities to enable students to achieve academic success.
- Individual student performance is increased when students are actively involved in the learning process, presented with a challenging curriculum, and provided with a variety of instructional approaches.
- A safe, attractive, comfortable, and clean environment promotes student learning.
- Students should be encouraged to be members of an academic family that sets high standards for everyone.
- Stakeholders share the responsibility for advancing the school's mission and nurturing intellectual freedom.
- A small, focused environment where stakeholders truly care about each other's well-being, achievement and best academic success.

VISION

The stakeholders' vision for the MAST Academy is that the school become a nationally recognized leader in college preparatory and marine-related education. To accomplish these ambitious goals, MAST Academy teachers, staff, parents, and community partners must prepare students to work in proximity to scientists, corporate leaders, and marine industry professionals, conduct original ocean-going research, present papers at national and international conferences, demonstrate unwaveringly the values of honor and integrity, and enter the best colleges and universities in the world.

SCHOOL DESCRIPTION

The MAST Academy is a nationally recognized school with an innovative marine theme. The school is designed for 550 students in grades 9-12. MAST students use state-of-the-art technology and real-world laboratory equipment and experience hands-on learning through diversified teaching strategies, classroom simulations, and internship opportunities. Extra curricular activities and athletics also mirror the marine theme.

EMPHASIS ON EDUCATIONAL REFORM

MAST Academy was established in 1991 with the purpose of educational restructuring and reform. Areas of education revitalization at MAST include:

- **Public School of Choice** builds upon a marine theme, while simultaneously creating excellence in education—performance, expectations, and outcomes.
- **Master Schedule** creates flexible class periods to support curriculum and field experiences.
- **Teaching Strategies** incorporate student learning styles prior to implementing marine-theme interdisciplinary techniques, hands-on applications, 21st century technology, research, reading and writing across the curriculum balanced with motivation, rewards and recognition.
- **Parent Involvement** includes parents/guardians/families as motivators, role models in leadership positions, partners in decision-making, and advisors.
- **Community Participation** features corporations, scientific agencies, civic organizations and business leaders as mentors, employers, and stakeholders in the total educational process.
- **Outreach Department** carries forth the commitment to introduce elementary and middle school students to marine-focused careers and activities through hands-on field experiences. This includes building an awareness of the marine environment in which we live
- **Facility** underscores the importance of the environmental theme with skylights, bay windows, large and small flexible spaces, museum type display areas, and a student recreation center. Administrative offices suggest a business operation in design and furnishings.

MAST DIFFERENCES IN CURRICULUM

- Require critical thinking and study skills/technology in the classroom.
- Require the identification of a curriculum major in the ninth grade.
- Require four (4) years of math and science and the completion of a science project in grades nine (9) and ten (10).

- Required Executive (District)/MAST Internship OR two years of Intel Research with an associated project. Internships are the culmination of the academic program and should reflect the program major.
- Require a 7-period day generating 29 credits for graduation including a required summer program prior to 9th grade.
- Require all students to complete summer reading assignment.
- Support major curriculum through career shadow experiences.

UNIQUE PROGRAM FEATURES

- Field research opportunities aboard seagoing vessels.
- College-like schedule.
- United States Coast Guard JROTC program.
- Dual enrollment with local colleges and universities.
- State-of-the-art science and computer labs and wireless availability.
- Mobile science laboratories: Land SHARC, WOW Wagon.
- Academic colloquia.
- Research opportunities.
- 75 community service hours (with 50 hours on a sustained project).

MONTHLY PRINCIPAL/STUDENT MEETINGS
CAPTAIN'S CALL

- To hear and share news for and about students, staff, and community.
- To learn what improvements can be made to foster the "success philosophy."
- To provide students an opportunity to apply learned "MAST Manners."
- To update students on school operations, rules, procedures, special events.
- To recognize and reward student accomplishments.

LEARNING OUTCOMES

Students will be able to:

- Enter the workforce with marketable skills—ability to think critically, solve problems, interact with colleagues, use technology, read and write proficiently.
- Apply skills in practical scientific internship or maritime related career.
- Meet or exceed college-entrance level expectations via Florida Bright Futures requirements and/or national assessments.
- Be placed in maritime and/or scientific agency career paths upon graduation with potential to earn a Bright Futures Scholarship and/or maritime licenses.
- Participate in community service related to the preservation of the South Florida environment.

GRADUATION REQUIREMENTS

Like college students, MAST students choose a major. Students are required to take a basic core curriculum and then augment it with seven specialty courses from the major. While the specialty courses are generally unique to MAST and include the possibility of AP and dual enrollment credit, the core requirements parallel the "Florida Bright Futures Program" curriculum. MAST students are required to earn 29 credits for graduation.

The following chart presents the current course requirements for high school graduation and MAST Academy requirements for 2009-2010.

2009-2010 Graduation Options and Course Requirements

SUBJECT AREA	HIGH SCHOOL 4-YEAR PROGRAM	COLLEGE PREPARATORY 3-YEAR PROGRAM	CAREER PREPARATORY 3-YEAR PROGRAM	MAST REQUIREMENTS
English/ESOL	4 credits (major concentration in composition & literature)	4 credits (major concentration in composition & literature)	4 credits (major concentration in composition & literature)	4 credits (major concentration in composition & literature)
Mathematics	4 credits (Algebra I, Geometry, & and 2 higher level math courses)	3 credits (Algebra I, Geometry, & a higher level math course)	3 credits (Algebra I, Geometry, & a third math course leading toward career preparation)	4 credits (Algebra I, & 2, Geometry, & a high level math course)
Science	3 credits (Earth/Space Science, Biology, & Chemistry or Physical Science)	3 credits (Earth/Space Science, Biology, & Chemistry or Physical Science)	3 credits (Earth/Space Science, Biology, & a third science course leading toward career preparation)	4 credits (Earth/Space Science, Biology, Chemistry, and 1 science)
Social Sciences	3 credits (World History, American History, American Government, & Economics)	3 credits (World History, American History, American Government, & Economics)	3 credits (World History, American History, American Government, & Economics)	3 credits (World History, American History, American Government, & Economics)
Foreign Language	Not required for graduation, but is required for admission to state universities.	2 credits in same second language or demonstrated proficiency.		2 credits in same second language or demonstrated proficiency.
Performing/Fine Arts/Practical Arts/Career & Technical Education	1 credit in performing/fine arts or a practical arts course that incorporates art artistic content and techniques of creativity, interpretation, and imagination	Not required	3 credits in a single career/technical education program, 3 credits in career/technical dual enrollment courses, or 5 credits in career/technical education courses	1.0 credit in performing art & 1.0 credit in practical art.
Physical Education/Health	1 credit (0.5 credit in Personal Fitness & 0.5 credit in a Physical Education elective)	Not required	Not required	1.5 credits (..5 credit in Personal Fitness, ..5 credit in a .Physical Education elective & .5 credit in Health)
Internship/Intel Research	Not required	Not required	Not required	1.0 credit/2.0 credit
Critical Thinking & Technology Class (required)				1.0 credit (a) See Academic program/purpose

Electives	7.5 credits	3 credits	3 credits	8.5 credits
Total	24 credits	18 credits	18 credits	29 credits
State Assessment Requirement	Passing score on Grade 10 FCAT	Passing score on Grade 10 FCAT	Passing score on Grade 10 FCAT	Passing score on Grade 10 FCAT
Grade Point Average (GPA) Requirement	Earn a cumulative GPA 2.0 on a 4.0 scale	Earn a cumulative GPA 3.0 on a 4.0 scale	Earn a cumulative GPA 2..0 on a weighted or unweighted scale	Maintain a cumulative 2.5 on a 4.0 scale

a. Mandatory Critical Thinking and Technology in the classroom courses for incoming ninth-graders during the summer school session preceding entrance into MAST Academy. [Summer School pending School Board approval]. These courses earn a total of one (1) elective credit.
b. A program of community service work, as approved by the School Board, shall be completed by all students. All MAST Academy students must complete a single project consisting of a minimum of 50 hours as part of the required total of 75 hours of community service required for graduation from MAST Academy. Each student, in cooperation with his/her parents/guardian, is required to submit a written proposal to the school seeking approval for the project before the project is started. The project must identify a social problem and address a need in the school or community. Upon completion, the student will need to provide the school with documentation of the completed hours and provide evidence of evaluation and reflection on the experience by completing the Project Summary Report. The 75 hours of completed community service is also a requirement of the Florida Bright Futures Scholarship and the Superintendent's Diploma of Distinction. At MAST Academy, students are required to complete and submit documentation of 25 hours (minimum) toward this requirement by the completion of 9^{th} grade and total of 50 hours by the completion of 10^{th} grade in order to be involved in extracurricular activities including fieldtrips, athletics, etc.

OTHER REQUIREMENTS FOR GRADUATION

Additional graduation requirements for 2010 graduates include earning a qualifying score on the Florida Comprehensive Assessment Test (FCAT) including the required Mathematics, Reading and Writing sections of the FCAT. demonstrating computer literacy, completing a community service project and earning an unweighted, cumulative grade point average (GPA) of 2.5*.

- A minimum 2.5 GPA is required to remain at MAST Academy throughout the four (4) high school years.

HIGH SCHOOL GRADUATION PROGRAMS

The Secondary School Redesign Act, also known as the "A++ Plan for Education," was passed by the Florida Legislature and signed into law by the governor to become effective on July 1, 2006. Several provisions of this new law will start immediately, such as academic course requirements at the middle school level to better prepare middle school students for senior high school. In order to increase the rigor and relevance of the senior high school experience and to prepare high school students for college and the workplace, the high school instructional program will be changed significantly.

- Ninth graders entering high school in the 2007-2008 school year and thereafter will be required to earn 16 core academic credits and eight elective credits in order to graduate with a high school diploma. Core requirements consist of four credits in English and mathematics; three credits of science and social science; one credit of fine arts; and one credit of physical education and health.
- To better engage students in planning and making decisions for their future, they will select an area of interest as part of their personalized education and career plan. Students are to earn four credits in a major area of interest, similar to college students, which may be in the arts, advanced academic studies, or career preparation. Each school will provide students and their parents with a list of district/state-approved major areas from which a selection may be made. The remaining four elective credits may be used to earn a second major area of interest, a minor, or for other elective courses.

Currently, there are three options for high school graduation and earning a diploma, two of which are accelerated options. Students and their parents may select from one of the three options, although if the student and his/her parents do not select a graduation option, the student will be considered to have selected the four-year, 24-credit standard program. In order to graduate all three options require students to earn a passing score on the 10th grade FCAT, earn a specific grade point average (GPA) on a 4.0 scale, and successfully complete the required courses listed in the chart entitled "2009-2010 Graduation Options and Requirements."

The graduation options are as follows:

- A four-year, 24 credit standard program;
- A three-year, 18-credits college preparatory program;
- A three-year, 18-credit career preparatory program;

Prior to selecting one of the two accelerated programs the following requirements must be met:

1. The requirements, advantages, and disadvantages of each graduation option are to be explained to the student and his/her parents.
2. A signed parental consent form (FM-6911) must be submitted to the principal and guidance counselor to enroll in either one of the accelerated program.

The requirements for the two accelerated options have changed several times by the Florida Legislature since these options became available to students in 2003-2004. Students are responsible for the requirements in force at the time they selected an accelerated program.

As mentioned above, the requirements for the four-year, 24-credit program were changed by the Florida Legislature for students entering the 9th grade in 2007-2008. Students who enroll in the four-year, 24 credit program prior to July 1, 2007, may continue that program and be responsible for the requirements at that time.

High school courses successfully completed by a student in grades 6 – 8 can be applied to the requirements for graduation. However, the student and his/her parents are reminded that high school credits earned prior to 9th grade as well as through the adult

education program are generally not recognized by the National Collegiate Athletic Association (NCAA) toward a student's eligibility to participate in college athletics. For information regarding athletic scholarships and eligibility, it is recommended that contact be made with the National Collegiate Athletic Association (NCAA) at www.ncaa.org or the athletic director at the student's school.

A student selecting either of the two accelerated options must be enrolled in high school for a minimum of three school years. Upon graduation this student will be eligible to apply for a Florida Bright Futures Scholarship, if he/she has met the program's requirements.

A student who has selected one of the three-year, 18-credit options and is considering enrollment in a magnet school/program, industry-focused academy, or vocational/technical preparation program, will need to inquire about the requirements of the specific program. There are certain programs which have requirements that would not be able to be met within either accelerated option. Staff from the individual programs will be able to explain the requirements of a given program and whether or not it would be possible to meet those requirements within the accelerated option.

Students who successfully complete the International Baccalaureate curriculum or the Advanced International Certificate of Education curriculum meet the graduation requirements and are eligible to receive a standard diplomat.

In order to graduate, a student who has selected the four-year, 24-credit standard program, must demonstrate mastery of the Sunshine state Standards, and complete a community service project. In order to be designated a 10th grade student, a 9th grade student must have earned a minimum of four credits, which must include one credit in English/ESOL or one credit in mathematics. To be designated as an 11th grade student, a 10th grade student must have earned a minimum of 9 credits, which must include two credits in English/ESOL, one credit in mathematics, and one credit in science **or** English/ESOL, two credits in Mathematics, and one credit in science. To be designated as a 12th grade student, an 11th grade student must have earned a minimum of16 credits, which must include 3 credits in English/ESOL, two credits in mathematics, and two credits in science **or** two credits in English/ESOL, three credits in mathematics, and two credits in science.

For a student enrolled in either one of the two accelerated graduation programs, the student must earn at least five credits by the end of grade 9 and earn 11 credits by the end of grade 10.

- Students who entered 9th grade in 2006-2007 and enrolled in the three-year, 18-credit college preparatory program, must meet an increased GPA graduation requirement of 3.5. Also, the enrollment prerequisite of FCAT scores in reading, mathematics, and writing has been eliminated for both the college preparatory program and career preparatory program. The standard graduation program, which consists of a four-year, 24-credit program did not change from the previous year relative to the requirements.

- Students who entered 9th grade in 2007-2008 enrolled in the standard four-year, 24-credit program will have to meet new graduation requirements. Of the 24 credits required for graduation, 16 credits are to be core curriculum credits

(English – 4, mathematics – 4, science – 3, social science – 3, fine arts – 1, physical education- 1, and majors, minors, and electives – 8). The two accelerated programs as amended in the 2004-2005 and 2006-2007 school years did not change relative to the requirements.

- Throughout this transition period, the grade 10 FCAT graduation requirement has not changed. However, students who entered 9th grade in 2006-2007 will be required to earn a passing score on FCAT Writing+, which will be included as part of the grade 10 FCAT.

As a magnet program, MAST Academy has a unique set of graduation requirements and major declaration surpassing the state requirements

EXPLANATORY NOTES

ENGLISH/LANGUAGE ARTS

English I, II, III, and IV or English I-IV through ESOL are required to meet the English/Language Arts graduation requirement. This requirement applies to all three graduation options. Additional ESOL credit may be counted as elective credit.

MATHEMATICS

For the 24 credit option for students who entered 9th grade prior to 2006-2007, 3 credits of mathematics are required to graduate; for students who entered 9th grade in 2007-2008 and thereafter, 4 credits of mathematics are required to graduate. For the 18 credit options students must earn 3 credits. A four-year recommended sequence includes Algebra I, Geometry, Algebra II, & Analysis of Functions. Informal Geometry meets the high school graduation requirement, but does not meet the minimum entrance requirement for the Florida University System.

SCIENCE

For students selecting any one of the three graduation options, the required courses include Earth/Space Science, which should be completed by the end of 9th grade, Biology I by the end of 10th grade, and Chemistry I or Physical Science by the end of 11th grade. Integrated Science will also meet the graduation requirement for science by taking Integrated Science I and two additional science courses.

SOCIAL SCIENCE

For students selecting any one of the three graduation programs, the required courses include American History - 1 credit, World History - 1 credit, American Government - .5 credit, and Economics - .5 credit.

FOREIGN LANGUAGE

For students selecting the college preparatory program, they are to complete any two sequential courses in the same foreign language, including American Sign Language, or demonstrate foreign language proficiency at a level equivalent to two years of high school foreign language. The school must document this foreign language proficiency. Students enrolled in the other two programs are not required to earn foreign language credit.

PERFORMING/FINE ARTS

For students in the 24 credit option who entered 9th grade prior to 2006-2007, they are to earn .5 credit in performing /fine arts (art, dance, theatre, music, speech, or debate and .5 credit in practical arts (any career / technical education course or a district approved annual computer or journalism course). They also must earn .5 credit in Life Management Skills. For students in the 24 credit option who entered 9th grade in 2007-2008 and thereafter, they must earn 1 credit in performing/fine arts. Students enrolled in the college preparatory program do not have to meet any requirement in this area. Students in the career preparatory program must meet the requirements listed in the chart above.

PHYSICAL EDUCATION

For students in the 24 credit option who entered 9th grade prior to 2007-2008, this requirement is met by successful completion of Personal Fitness or Adaptive Physical Education and any other approved physical education semester course. Participation in an interscholastic sport at the junior varsity or varsity level, for two full seasons, and obtaining a passing score of "C" or higher on a competency test on personal fitness shall satisfy the one credit physical education requirement. If the student satisfies the physical education graduation requirement through the interscholastic sport option, the student must earn one additional elective credit since no credit is granted for an interscholastic junior or senior varsity sport. Completion of one semester with a grade of "C" or better in a marching band class, in a physical activity class that requires participation in marching band activities as an extracurricular activity, or in a Reserve Officers Training Corps (R.O.T.C.) class with a significant component of drills, shall satisfy the one-half physical education elective requirement, but the student must still complete the Personal Fitness or the Adaptive Physical Education course. For students who entered 9th grade in 2007-2008 and thereafter, this requirement is met by successful completion of Personal Fitness or Adaptive Physical Education and any other approved physical education semester course. Participation in an interscholastic sport at the junior varsity or varsity level for two full seasons shall satisfy the one credit physical education requirement if the student passes a competency test on personal fitness with a score of "C" or higher. If the student satisfies the physical education graduation requirement through the interscholastic sport option, the student must earn one additional elective credit since no credit is granted for an interscholastic junior or senior varsity sport. Completion of one semester with a grade of "C" or higher in a marching band class, in a physical activity class that requires participation in marching band activities as an extracurricular activity, or in a dance class shall satisfy one-half credit in physical education or one-half credit in performing/fine arts. Students must still successfully complete the Personal Fitness course or the Adaptive Physical Education course. Completion of two years of a Reserve Officer Training Corps (R.O.T.C.) class with a significant component in drill and taking the one-half credit Personal Fitness course or, if appropriate, the Adaptive Physical Education course, shall satisfy the one-credit requirement in physical education and the one-credit requirement in performing fine arts. This credit may not be used to satisfy the personal fitness requirement or the requirements for adaptive physical education under an individual education plan (IEP) or a 504 plan

ELECTIVES

For students in the 24 credit option who entered 9th grade prior to 2006-2007, 8.5 elective credits are required**.** Students enrolled in the college preparatory are required to take 3

credits and those students in the career preparatory program are required to take 2 credits unless they select the 5-credit career/technical option. For students in the 24 credit option who entered 9th grade in 2007-2008 and thereafter, they are required to complete 4 credits in a major area of interest, such as sequential courses in a career/technical program, fine and performing arts, or academic content area, selected by the student as part of the student's ePEP. Students are also required to take 4 credits in elective courses as part of the student's ePEP, which include a second major area of interest, a minor area of interest, elective courses, or intensive reading or mathematics intervention courses. Any senior high school course listed in the current *Florida Course Code Directory* will fulfill the elective graduation requirement for any of the three graduation options except study hall and other courses listed as non-credit, Adult Basic Education, and GED preparation.

COMMUNITY SERVICE

For students in the 24 credit option, the completion of a community service project is an additional graduation requirement regardless of their date of entry into 9th grade. Students in either one of the 18 credit options are **not** required to complete a community service project. However, one of the requirements for the Florida Bright Futures Scholarship Program's Academic Scholars Award is 75 hours of community service. (see graduation requirements, sec. b)

A program of community service work, as approved by the School Board, shall be completed by all students. All MAST Academy students must complete a single project consisting of a minimum of 50 hours as part of the required total of 75 hours of community service required for graduation from MAST Academy. Each student, in cooperation with his/her parents/guardian, is required to submit a written proposal to the school seeking approval for the project before the project is started. The project must identify a social program and address a need in the school or community. Upon completion the student will need to provide the school with documentation of the completed hours and provide evidence of evaluation and reflection on the experience by completing the Project Summary Report. The 75 hours of completed community service is also a requirement of the Florida Bright Futures Scholarship, Superintendent's Diploma of Distinction.

HIGH SCHOOL DIPLOMAS/CERTIFICATES

The Miami-Dade County School Board provides for the awarding of a standard diploma, a certificate of completion, a CPT-eligible certificate of completion, or a special certificate of completion.

Standard Diploma: A standard diploma will be awarded to graduates, if the student has earned the required credits and attained the grade point average for the graduation program selected. Also, students must pass the Grade 10 Florida Comprehensive Assessment Test (FCAT) SSS. The purpose of the standard diploma is to certify that the student has met all district and state standards for graduation. A special education student will be awarded a standard diploma if all of the criteria for a standard diploma have been met by that student.

Superintendent's Diploma of Distinction: This diploma will be awarded to students who are enrolled in the 4-year, 24-credit option and complete an academically rigorous course of study. The requirements include at least four honors, Advanced Placement, International Baccalaureate or International Studies courses; and completion of 75 hours of community service, which includes identification of a social problem of interest, development of a plan for personal involvement in addressing the problem, and through papers and other presentations, evaluate, and reflect upon the experience. All students must earn a 3.5 GPA (weighted scale) by the end of the first semester of their senior year with no final grade less than a "C."

Certificate of Completion: A student who is enrolled in the 4-year, 24-credit option and has met all requirements for graduation except passing the HSCT or Grade 10 FCAT, or earning the GPA required for graduation shall be awarded a certificate of completion. A student may make further attempts to meet the requirements for a standard diploma.

CPT—Eligible Certificate of Completion: Students who earn the 24 required graduation credits and achieve a GPA of 2.0 or higher, but do not pass the grade 10 FCAT, are eligible to receive the Common Placement Test (CPT)—eligible certificate of completion. Students who receive the CPT—eligible certificate of completion may enroll directly into a Florida community college or postsecondary career and technical education program. Based upon the score the student receives on the CPT, the student may enroll in remedial or credit courses at the community college.

Special Diploma and Special Certificate of Completion: Students with disabilities enrolled in the 4-year, 24-credit program and have been properly classified may be eligible to receive a special diploma or a special certificate of completion. Parents who have questions concerning these special diplomas or certificates are urged to consult the school counselor, exceptional student education department chairperson, or Regional Center Exceptional Student Education staffing specialist.

FOR STUDENTS WHO ENTER GRADE 9 IN 2009-2010
THE FOLLOWING STANDARD DIPLOMA DESIGNATIONS ARE AVAILABLE:

Superintendent's Honors Diploma of Distinction: This diploma will be awarded to students who are enrolled in the 4-year, 24-credit program and complete an academically rigorous course of study. To be eligible students must earn at least a 3.5 weighted GPA, complete a minimum of six high school credits in honors, AP, IB, AICE, IS, and/or dual enrollment courses, earn a 970 on the SAT and/or 20 on the ACT, and complete a minimum of two years of a foreign language.

Superintendent's Global Diploma of Distinction: This diploma will be awarded to students who are enrolled in the 4-year, 24-credit program and complete an academically rigorous course of study. To be eligible students must earn a 4.0 weighted GPA, complete a minimum of 12 high school credits in honors, AP, IB, AICE, IS, and/or dual enrollment courses, earn a 1270 on the SAT and/or 28 on the ACT, complete a minimum of three years of the same foreign language, perform 100 hours of community service, and complete a research project.

Professional Academic Diploma: This diploma will be awarded to students who are enrolled in the 4-year, 24-credit program and complete at least two of the following criteria: An internship (Career Executive Opportunity {CEO}, or Executive Honors Program, or Career Technical Education {CTE}, or On the Job Training {OJT}, or Summer Magnet Internship); Capstone Project; Qualify for Gold Seal; and/or Pass Industry Certification.

Professional Career Education Diploma: This diploma will be awarded to students who are enrolled in the 4-year, 24-credit program and complete the following criteria**:** Earn a prescribed score on the College Placement Test (CPT) or an equivalent test identified by the Florida Department of Education, complete a minimum of one Occupational Completion Point (OCP) in an industry-certified career program or two courses in a technology education program, complete a one credit course addressing workplace readiness skills, attain work-based learning experience as defined by Florida Board of Education rule, and complete a Capstone Project.

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. **ASVAB** – Armed Services Vocational Aptitude Battery (11, 12)
3. **PLAN –** Preliminary ACT (10)
4. **PSAT** – Preliminary Scholarship Aptitude Test (10, 11)
5. **SAT I: Reasoning Test** – formerly the Scholastic Assessment Test (11, 12)
6. **SAT II: Subject Test** – formerly the Scholastic Assessment Test (11, 12)
7. **CPT** – College Placement Test (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.

FLORIDA BRIGHT FUTURES SCHOLARSHIP PROGRAM

www.MyFloridaEducation.com

THE FLORIDA BRIGHT FUTURES SCHOLARSHIP PROGRAM establishes three lottery-funded scholarships for Florida high school graduates who demonstrate high academic achievement who enroll in eligible Florida public or private postsecondary institutions. The scholarship may be used for either full-time or part-time enrollment and is renewable. Basic information and qualification requirements are outlined below.

General Requirements For All Award Types

To be eligible for an initial award from **any** of the three types of scholarships, a student must:

- Be a Florida resident and a U.S. citizen or eligible non-citizen;
- Authorize the release of eligibility information to the Florida Department of Education;
- Earn a Florida high school diploma or its equivalent from a Florida public or private high school;
- Successfully complete certain courses while attaining the grade point average specified in the scholarship type;
- Be accepted by and enroll in an eligible Florida postsecondary education program;
- Be enrolled for at least six (6) semester hours or the equivalent;
- Not have been found guilty of, nor pled no contest to a felony charge;
- Apply for a scholarship from the program prior to high school graduation by completing the online Florida Financial Aid Application (FFAA) for the Florida Financial Assistance Database (SSFAD) at www.FloridaStudentFinancialAid.Org ; and
- Use the award within three years of high school graduation.

Bright Futures: Florida Academic Scholars
Initial Eligibility Requirements for High School Applicants

AWARD LEVEL A student may receive funding for only one award (FAS, FMS, or GSV).	Public Institution—An award equal to 100% of tuition & allowable fees, plus the specified amount established by the Florida Legislature for college-related expenses (excluding summer term) prorated by term and hours. Private Institution—Fixed award amount based on 100% of the average tuition and allowable fees covered at a comparable Florida public institution including the specified amount established by the Florida Legislature for college relatred expenses (excluding summer term) prorated by term and hours.
GRADE POINT AVERAGE (GPA) Note: GPA's are not rounded.	3.5 weighted GPA using the credits listed below, combined with the test scores and community service hours listed below Weighting for more challenging higher level courses is prescribed by law as .25 per course per semester or .50 per course per year
REQUIRED CREDITS See the Comprehensive Course Table on the Bright Futures website to identify courses that count toward each award level.	Courses must include 15 credits of college preparatory academic courses. 4 English (3 with substantial writing) 3 Mathematics (Algebra I and above) 3 Natural Science (2 with substantial lab) 3 Social Science 2 Foreign Language (in the same language) 15 Credits May use up to 3 additional credits from courses in the academic areas listed above and/or AP or IB fine arts courses to raise the GPA.
COMMUNITY SERVICE	75 hours, as approved by the district or private school
TEST SCORES	Best composite score of 1270 SAT or 28 ACT. The new written subtests for both the SAT and ACT will not be used in the composite. SAT II exams are not used for Bright Futures eligibility. ACT scores are rounded up for scores with .5 or higher; SAT scores do not require rounding. Subsections of the SAT, ACT, or CPT from different test dates may be used to meet the test criteria. For spring eligibility evaluations, test dates through the end of January will be admissible. For summer eligibility evaluations, test dates through the end of June will be admissible.
OTHER WAYS TO QUALIFY Initial eligibility criteria used in "Other Ways to Qualify" must be met by high school graduation. Contact the Bright Futures office for further details.	The other ways to qualify listed below must also meet the community service hours requirement. - National Merit or achievement Scholars and Finalists - National Hispanic Scholars - IB Diploma recipients with a best composite score of 1270 SAT or 28 ACT - AICE Diploma recipients - Students who have completed the AICE curriculum with a best composite score of 1270 SAT and 28 ACT. - Students who have attended a home education program according to s.232.02(4), F.S., registered with the district during grades 11 and 12, with best composite score of 1270 SAT or 28 ACT - GED with best composite score of 1270 SAT or 28 ACT and a 3.5 weighted GPA in the above 15 required credits - Early Admission with best composite score of 1270 SAT or 28 ACT and a 3.5 weighted GPA in curriculum courses completed. - Three-year standard college preparatory program with best composite score of 1270 SAT or 28 ACT and a 3.5 weighted GPA in the above 15 required credits.

Bright Futures: Florida Medallion Scholars Award
Initial Eligibility Requirements for High School Applicants

AWARD LEVEL A student may receive funding for only one award (FAS, FMS, or GSV).	Public Community College – An award equal to 75% of tuition and allowable Fees for college credit courses leading to an associate degree (excluding summer term). Other Public Institutions - An award equal to 75% of tuition and allowable fees (excluding summer term). Private Institution – Fixed award amount based on 75% of the average tuition and fees covered at a comparable Florida public institution prorated by term and hours.
GRADE POINT AVERAGE (GPA) Note: GPA's are not rounded.	3.0 weighted GPA using the credits and test scores listed below, combined with the test score listed below. Weighting for more challenging high level courses is prescribed by law as .25 per course per semester or .50 per course per year.
REQUIRED CREDITS See the comprehensive Course Table on the Bright Futures Website to identify courses that count toward each award level**.**	Courses must include 15 credits of college preparatory academic courses. 4 English (3 with substantial writing) 3 Mathematics (Algebra 1 and above) 3 Natural Sciences (2 with substantial lab) 3 Social Science 2 Foreign Language (in the same language) 15 credits May use up to 4 additional credits from courses in the academic areas listed above and/or AP or IB fine arts courses to raise the GPA.
COMMUNITY SERVICE	No requirement
TEST SCORES	Best composite score of 970 SAT or 20 ACT. The new written subtests for both the SAT and ACT will not be used in the composite. SAT II exams are not used for Bright Futures eligibility. (SAT scores do not require rounding. ACT scores are rounded up for scores with .5 and higher). Subsections of the SAT, ACT or CPT from different test dates maybe used to meet the test criteria. For spring eligibility evaluation, test dates through the end of January will be admissible. For summer eligibility evaluation, test dates through the end of June will be admissible.
OTHER WAYS TO QUALIFY Initial eligibility criteria used in "Other ways to Qualify" must be met by high school graduation**.**	- National Merit or Achievement Scholars and Finalists and National Hispanic Scholars who have not completed 75 hours of community service. - Students who have completed the IB Curriculum with best composite score of 970 SAT or 20 ACT. - AICE Diploma recipients who have not completed 75 hours of community service. - Students who have completed the AICE curriculum with best composite score of 970 SAT or 20 ACT. - GED with best composite score of 970 SAT or 20 ACT and a 3.0 weighted GPA in the above 15 required credits - Early Admissions with best composite score of 970 SAT or 20 ACT and a 3.0 weighted GPA in curriculum courses completed. - Three-year standard college preparatory program with best composite score of 970 SAT or 20 ACT and a 3.0 weighted GPA in the above 15 required credits.

BRIGHT FUTURES: FLORIDA GOLD SEAL VOCATIONAL SCHOLARS AWARD
(GSV)

Initial Eligibility Requirements for High School Applicants

AWARD LEVEL A student may receive funding for only one award (FAS, FMS, or GSV).	Public Institution - An award equal to 75% of tuition and allowable fees (excluding summer term). Private Institution – Fixed award amount based on 75% of the average tuition and fees covered at a comparable Florida public institution (excluding summer term) prorated by term and hours.
GRADE POINT AVERAGE (GPA) Note: GPA's are not rounded.	3.0 weighted GPA using the 15 credits listed below, and a 3.5 unweighted GPA in a minimum of 3 career/technical job preparatory or technology education program credits in career/technical education program. Weighting for more challenging higher level courses is prescribed by law as .25 per course per semester or .50 per course per year.
REQUIRED CREDITS See the comprehensive course table on the Bright Futures website to identify courses that count toward each award level**.**	For students who enter 9th grade in 2007-2008 courses must include the 16 core credits required for high school graduation. 4 English 4 Mathematics 3 Natural Sciences 3 Social Science (Am.Hist., World Hist., Am. Gov't., Economics) 1 Performing Art 1 Physical Education Plus a minimum of 3 Vocational Job-Preparatory or Technology Education Program credits in one vocational program.
COMMUNITY SERVICE	No requirement
TEST SCORES	Students must earn the minimum score on each subsection of the CPT, SAT, or ACT. Sections of different test types may not be combined. Sections of different test dates may be used to meet test criteria CPT: Reading 83; Sentence Skills 83 Algebra 72 **OR** SAT: Verbal 440; Math 440 **OR** ACT: English 17; Reading 18; Math 19 For spring eligibility evaluations, test dates through the end of January will be admissible. For summer eligibility evaluations, test dates through the end of June will be admissible.
OTHER WAYS TO QUALIFY Initial eligibility criteria used in "Other Ways to Qualify" must be met by high school graduation. Contact the Bright Futures Office for further details.	The other ways to qualify listed below must also include a 3.5 unweighted GPA in a minimum of 3 career education credits in one career education program and minimum test scores listed above. - 3-year Career Preparatory diploma with a 3.0 weighted GPA using the 15 core credits required for graduation: 4 English (3 with substantial writing); 3 mathematics (including Algebra 1); Natural Science (2 with substantial lab); 3 Social Science; 2 Foreign Language (in the same language) - 3-year College Preparatory diploma with 3.0 weighted GPA using the 15 core credits required for graduation: 4 English (3 with substantial writing); 3 Mathematics (Algebra I and above); 3 Natural Science (2 with substantial lab); 3 Social Science; 2 Foreign Language (in the same language) - GED with 3.0 weighted GPA the core credits required for your selected high school graduation option (standard, career, or college)

STATE UNIVERSITY SYSTEM ADMISSIONS POLICIES

COMPETITIVE ADMISSIONS

Admission decisions are based on high school graduation, grade point average in academic core courses, admissions test scores, and course distribution requirements. The minimum requirements apply to all of the state universities; however, universities are permitted to have higher admission standards. There are three methods to qualify for admission into the universities: the traditional admissions criteria based on the Florida Division of Colleges and Universities sliding scare, the Talented Twenty program, or the student profile assessment.

GRADE POINT AVERAGE IN HIGH SCHOOL ACADEMIC CORE COURSES

In addition to graduation from an accredited high school with the 18 credits in approved college prep courses, students must meet grade point average and test score requirements as indicated on the chart below. The weighted grade point average (GPA) will be calculated by the university using a 4.0 scale from grades earned in high school academic core courses in designated subject areas. Additional weights may be assigned to certain grades in state designated Honors, Advanced Placement, International Baccalaureate, Dual Enrollment, Advanced International Certificate of Education, International Studies, and other advanced courses. Admissions eligibility for students who are not in the Talented Twenty program will be determined from the sliding scale, which allows an applicant to balance a lower recalculated GPA with a higher test score or a lower test score with a higher GPA.

TALENTED TWENTY PROGRAM

The Talented Twenty Program is part of the Governor's One Florida Initiative. Students eligible for the Talented Twenty Program are guaranteed admission to one of the eleven state universities, and are given priority for award of funds from the Florida Student Assistance Grant (FSAG). The FSAG program is a need-based grant; therefore, Talented Twenty students must meet FSAG eligibility requirements in order to be eligible for priority funding. Please note that while eligible students are guaranteed admission at one of the state universities, they may not be admitted to the campus of choice.

Qualifications: In order to qualify for the Talented Twenty Program, one must:

- be enrolled in a Florida public high school and graduate with a standard diploma
- be ranked in the top 20% of the class after the posting of seventh semester grades (with validation of the eighth semester ranking) for students enrolled in the 4-year, 24-credit option. For students in either one of the two 3-year, 18-credit options, the ranking will occur after the posting of the fifth semester grades (with validation of the sixth semester ranking).
- take the ACT or SAT (with no minimum score required).
- complete all eighteen college preparatory courses as specified in State Board of Education Rule.

Application for State Universities: High school counselors are prepared to assist students with the application process for state university admissions. To be considered for the FSAG program, students must file the Free Application for Federal Student Aid (FAFSA) in time to meet the application deadline established by the institution they plan to attend. The FAFSA is available online at www.fafsa.ed.gov and uses parent and student income information in a formula developed by the United States Congress to calculate the financial contribution families are expected to make toward a student's postsecondary education.

ADMISSIONS TEST SCORES & SLIDING ADMISSION SCALE

Admissions eligibility for students who are not in the Talent Twenty will be determined from the sliding scale that considered the university calculated high school grade point average and the admissions test score. Students with a calculated "B" average (3.0 on a 4.0 scale) or higher do not have to meet a minimum test score, although either an SAT or an ACT score must be submitted.The sliding scale shown in the following table allows an applicant to balance a lower GPA with a higher test score or a lower test score with a higher GPA. The applicant's GPA will be calculated by the university as described above, using only the grades earned in the required academic core courses listed on the following pages.

STUDENT PROFILE ASSESSMENT

The majority of students are admitted on the basis of their past academic achievement and admissions test scores in relation to the minimum requirements. Universities are allowed flexibility to admit a limited number of students as exceptions to the minimum requirements provided that the university determines that the student has potential to be successful in college. Applicants who do not meet minimum requirements may be eligible for admission through a student profile assessment which considers factors such as: family educational background, socioeconomic status, special talents, or the high school or geographic location of the applicant. Any important attributes of special talents should be reported with the application. The factors will not include preferences on the basis of race, national origin, or gender.

SLIDING SCALE USED FOR ADMISSIONS

If HS GPA in required Academic Courses is:	Then SAT or ACT Score must equal or exceed:	
H.S. GPA	**ACT***	**SAT - I**
2.0	25	1140
2.1	24	1110
2.2	24	1090
2.3	23	1060
2.4	22	1030
2.5	21	1010
2.6	21	1000
2.7	21	990
2.8	21	980
2.9	20	970
3.0	*	*

* There is no minimum test score for students with a GPA of 3.0 or better; however, either an SAT or ACT score must still be submitted.

THE CAREER TECHNICAL EDUCATION/COLLEGE CONNECTION

Students completing specific Career Technical Education programs can earn postsecondary hours and/or scholarships to enable them to complete postsecondary training. The following options explain how students may maximize their high school CTE course work. For additional information students should contact their program instructor, counselor, or career specialist.

Students completing CTE training courses in the high school may earn credits toward completion of CTE training programs at area technical centers (Miami Lakes Educational Center, Robert Morgan Educational Center, Lindsay Hopkins Technical Education Center). Students completing CTE training programs at area technical centers may earn credits toward an Associate of Science degree at Miami-Dade College. Specifically negotiated agreements between the college and M-DCPS award students college credit for CTE program work successfully completed in high school.

Articulation Agreements = Postsecondary Credit for Vocational Courses: Students completing vocational training courses in the high school may earn credits toward completion of vocational training programs at area technical centers (Miami Lakes Technical Education Center, Robert Morgan Vocational Technical Institute, Lindsey Hopkins Technical Education Center). Students completing vocational training programs at area technical centers may earn credits toward an Associate of Science degree at Miami-Dade College. Specifically negotiated agreements between the college and Miami-Dade County Public Schools award students college credit for vocational program work successfully completed in high school.

CAREER PATHWAYS

Career Pathway is an exciting and challenging educational initiative that allows students to obtain a sequential program of study which leads to a post-secondary career. Career Pathway students typically select general programs of study; show interest in career technical fields; transition on to a two-year certificate program; or pursue an associate or baccalaureate degree. The Career Pathway program of study provides students with skills and knowledge through a variety of curriculum choices and college credits. Students should check with their counselors for information and approval of Career Pathway courses. After graduation from high school, students can continue their career-focused education at the community college or post-secondary institutions and earn a two-year associate degree or a two-year certificate. Post-secondary credits are granted through articulation agreements which may contain a dual-enrollment component.

GRADING STUDENT PERFORMANCE

By School Board directive, academic grades are to reflect the student's academic progress. The determination of the specific grade a student receives must be based on the teacher's best judgment after careful consideration of all aspects of each student's performance during a grading period, including such factors as class attendance, homework, and participation.

In authorized semester courses, the student's final grade shall be determined as follows: 40 percent value for each of two nine-week grading periods and 20 percent value for the final examination, with a provision for teacher override.

In authorized annual courses, the student's final grade shall be determined as follows: 20 percent value for each of four nine-week grading periods, 10 percent value for the midterm exam, and 10 percent for the final exam, with a provision for teacher override. In order to pass an annual course in grades 9-12, a student will earn a minimum of 10 grade points, of which a minimum of five must be earned in the second semester. Teacher override (either up or down) can be used.

The following are the academic grades used:

Grade	Numerical Value (%)	Verbal Interpretation	Grade Point Value
A	90 – 100 %	Outstanding Progress	4
B	80 - 89 %	Good Progress	3
C	70 - 79 %	Average Progress	2
D	60 - 69%	Lowest Acceptable Progress	1
F	0 - 59 %	Failure	0
I	0	Incomplete	0

FORGIVENESS POLICY

For senior high school students the forgiveness policy for required courses is limited to replacing a grade of a D or a F with a grade of a C or higher earned subsequently in the same or comparable course. The forgiveness policy for elective courses is limited to replacing a grade of a D or a F with a grade of a C or higher earned subsequently in another course. In either situation when a student attempts forgiveness for a grade, only the new grade will be used to compute the students GPA. Any course not replaced according to this policy shall be included in the calculation of the cumulative grade point average required for graduation.

- The authority to apply a grade for forgiveness does not provide the authority to alter a student's record to delete the forgiven course. Therefore, forgiven courses and grades must be included on a student's transcript. However, forgiven grades will be bypassed for the purposes of a GPA calculation.

- A grade of D or F may be forgiven only after a grade of C or better is earned. Therefore, the C or better must be earned subsequent to the grade of D and / or F.
- Courses that are repeated and the forgiveness policy cannot be applied (e.g. the same grade of a C was earned twice in Algebra I) will be included in the calculation of the GPA.
- Required core courses and/or courses that are required electives for graduation, e.g., Personal Fitness, Life Management, can only be forgiven with the same or equivalent level of course.
- **The only exception to these forgiveness policies shall be made for a student in the middle grades who takes a high school course for high school credit beginning in the 2007-2008 school year and earns a grade of "C," "D," or "F." In such case, the forgiveness policy will allow the replacement of the grade with a grade of "C" or higher, earned subsequently in the same or a comparable course.**

GRADE POINT AVERAGE

Grade point averages (GPA) are calculated for any of the reasons listed below.

- High school graduation
- Rank in class
- Eligibility to participate in interscholastic extracurricular activities
- Academic and recognition programs
- Placement on the honor roll and/or membership in honor societies
- College admissions and scholarship competitions

The grade and bonus point values shown in the chart below are used in determining unweighted (without bonus points) and weighted (with bonus points) GPA's.

GRADE AND BONUS POINT VALUES:

Letter Grades	Grade Points	Bonus Points			
		Honors	**Advanced Placement**	**International Baccalaureate or Studies**	**Bright Futures**
A	4	**1**	**2**	**2**	**.5**
B	3	**1**	**2**	**2**	**.5**
C	2	**1**	**1**	**1**	**.5**
D	1	**0**	**0**	**0**	

NOTE: Dual enrollment courses are awarded either honors or the equivalent of Advanced Placement bonus points as required by State statute.

The grade point average used for determining the final rank in class for seniors includes grades from all courses in which credits have been earned for high school graduation and the first semester of the student's senior year. The calculation process produces an unweighted GPA to which bonus values are added. This GPA is used for the ranking process.

Students selecting one of the three-year programs are included in the overall class ranking for their graduation year based on the relative ranking of his/her cumulative GPA. These students are also eligible for consideration as valedictorian, salutatorian, and for the Talented Twenty program.

The levels of the Academic Recognition Program are as follows:

- **CUM LAUDE:** The upper 15% of the graduating class, excluding the *Summa* and *Magna Cum Laude* students, using a weighted GPA or students who have a 4.0 GPA or higher
- **MAGNA CUM LAUDE:** The upper 10% of the graduating class, excluding the *Summa Cum Laude* students, using a weighted GPA
- **SUMMA CUM LAUDE:** The upper 5% of the graduating class using a weighted GPA

The school's counselor can assist students and parents in determining the processes for computing the GPA's used for the various purposes listed above.

Grade Point Average (GPA) is an element used to determine eligibility in various programs. The chart below identifies a number of the programs, the corresponding GPA, and conditions for calculating the GPA. Definitions of terms used are provided on the next page.

PURPOSE	MINIMUM REQUIRED	CONDITIONS
Graduation	2.0	Overall unweighted, cumulative, unrounded on credits earned for graduation. Calculated end of senior year with F grades earned prior to 9/1/98 and forgiven D and F grades bypassed. F's earned after 9/1/98 included until replaced. Current seniors may substitute a GPA using only courses completed from the start of 1997-1998.
Interscholastic Extracurricular Activity Participation	2.0	Overall unweighted, cumulative, unrounded on credits earned for graduation. Calculated at the end of each semester including F grades and bypassing forgiven D's and F's. Incomplete grades and blanks will be treated as F's. Current juniors and seniors may substitute a GPA using only courses completed from the start of 1997-1998.
Rank in Class	None	Overall weighted, cumulative and rounded to the third place to the right of the decimal. F's earned after 9/1/98 included until replaced. Initial ranking calculated in October of the students' senior year. Final ranking calculated in February of the students' senior year.
Superintendent's Diploma of Distinction	3.5	Overall weighted cumulative GPA calculated at the end of the seventh semester. Must include 4 honors/AP/IB courses.
Florida Academic Scholars Award	3.5	Weighted, cumulative, and unrounded on 15 specific credits needed to meet admissions requirements for state university system. Grades in level III, AP, IB, and dual enrollment courses receive .5 bonus point.
Florida Medallion Scholars Award	3.0	(Same as above)
Florida Gold Seal Vocational Scholars Award	3.0 3.5	Weighted, cumulative, and unrounded on 15 specific credits required for graduation, excluding elective credits. Unweighted and unrounded on three courses in a job preparatory program.
Admission to State University System	3.0	Cumulative on 15 credits identified by the Board of Regents and listed in Counseling for Future Education as meeting requirements for admission.
NCAA Participation Division I and II	2.0	Cumulative and unweighted on 13 high school core academic courses. GPA will vary with corresponding SAT and ACT scores. (Credits earned in middle school or on first impulse in adult education programs are excluded.)

DEFINITIONS:

ADD-ON BONUS VALUES: Bonus values used to calculate the grade point average used for establishing rank in class; determined by dividing the number of bonus points by the number of credits necessary to be ranked.

GRADE POINTS: Numerical values assigned to letter grades. See chart below.

BONUS POINTS: Additional numerical values assigned to letter grades in honors, pre-International Baccalaureate, dual enrollment, Advanced Placement, International Baccalaureate and International Studies courses. See chart below.

CUMULATIVE GRADE POINT AVERAGE: A grade point average computed by using grades received for more than one grading period or year.

TRADITIONAL GRADE POINT AVERAGE: A grade point average established by dividing the number of grade points or grade and bonus points by the number of credits earned.

NON-CUMULATIVE GRADE POINT AVERAGE: A grade point average computed by using grades received for a single term, semester, or grading period.

WEIGHTED GRADE POINT AVERAGE: A grade point average that includes bonus points.

UNWEIGHTED GRADE POINT AVERAGE: A grade point average without the inclusion of bonus points.

REPORT CARDS

Report cards are issued approximately one week following the conclusion of each nine-week grading period. Report cards are to be retained by the parents and not returned to the school.

PROBATION

Students must understand from the outset that it is a privilege to attend the MAST Academy. Academic achievement and good behavior are expected. It may be necessary, however, to give a student a second chance by placing him/her on probation. There are two types of probation: academic and disciplinary.

ACADEMIC PROBATION

Students who do not demonstrate acceptable academic efforts after the first semester will be placed on probation for the second semester. During that time, the student's profile will be closely examined, parents contacted, tutoring session required and appropriate actions taken as needed to help the student stabilize academic performance. Students who do not earn the required 2.5 GPA are counseled for alternative placement consideration including returning to their home school.

DISCIPLINARY PROBATION

Due to the high risk factor created by MAST's proximity to the water, misbehavior will not be tolerated. The safety of students and faculty is paramount.

Students who do not maintain at least a "B" conduct average or 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.

CODE OF STUDENT CONDUCT

The Code of Student Conduct for Miami-Dade County Public Schools is available on the Miami-Dade County Public schools website (www.dadeschools.net) under the publications link The Code defines distinct violations which are representative of those acts that frequently cause disruption of the orderly educational process. This list is not all-inclusive, and committing an act of misconduct not listed will be subject to the discretionary authority of an administration.

PROVISIONS FOR ACCELERATION

Students may utilize one of the acceleration options listed below to pursue a more challenging program of study or to accelerate entry into postsecondary institutions or vocations of their choice.

In addition to the two accelerated graduation programs (the college preparatory program and the career preparatory program), there are several provisions whereby students may accelerate their graduation or take additional courses prior to graduation. These include:

Middle School Options. Up to six credits may be earned, with parent/guardian permission, in grades 6,7 and/or 8, which may be applied toward the total credits needed for graduation, college admission, or Florida Bright Futures Scholarship Program requirements. During the time the students are enrolled in designated senior high courses, they are considered to be grade 9 students for those class periods. Students and their parents/guardians will be offered an opportunity, in the fall of the student's freshman year, to restrict the inclusion of credits earned in this way from appearing on the high school transcript. The courses will remain in part of the student's middle school record. Factors to be considered in removing the courses from the high school record include the impact on the student's GPA and subsequent rank in class,

the lack of recognition by the National Athletic Association (NCAA) for senior high school courses taken in a grade below grade 9 and the benefit of retaking a course in which all skills have not been mastered.

Optional Seventh Period. With prior approval of the high school principal, credits earned in an adult education optional seventh period may be applied to graduation for a day school program. The optional seventh period classes funded through the adult education program are considered an extension of the day school program and are not counted in the four-course limit for transferable adult education credits.

Dual Enrollment. Dual enrollment allows high school students to simultaneously earn college or career/technical education credit toward a postsecondary degree or certificate and credit toward their high school diplomas. 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 CTE courses, (b) pass the appropriate section of the college placement test (CPT), and (c) meet additional admissions criteria established 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.

Early Admission: Early admission is a form of dual enrollment through which eligible students may enroll in a college or university on a full-time basis in courses that are creditable toward a high school diploma and the associate or baccalaureate degree.

Advanced Placement. Advanced Placement (AP) courses provide college experience to students while they are still high school students. AP programs are offered in each major academic area. Post-secondary credit for an AP course shall be awarded to students who score at least a 3 on a 5-point scale on the corresponding AP exam.

International Baccalaureate. The International Baccalaureate (IB), the Advanced International Certificate of Education (AICE), and the International Studies (IS) programs are offered in several schools for which eligible high school students earn credit toward graduation and may receive post-secondary credit at colleges and universities.

Career Education. Any career education course authorized for grades 13 or higher may be taken for credit by students in grades 9-12, based on the career objectives of the students.

Florida Virtual School. Middle and senior high school students are eligible to enroll in the Florida Virtual School. The courses offered are teacher-facilitated and available throughout the state. Courses are based upon the same criteria as those taught in the standard high school program and, therefore, generate the same credit for students. Middle school students may earn credit only in those courses designated as acceleration courses as indicated above. Secondary students are also eligible to enroll in courses offered through the Miami-Dade Virtual School. A complete list of courses is available through Miami-Dade Virtual School's website at http://mdvs.dadeschools.net. or through the Florida Virtual School's website at http://www.flvs.net

Credit by Examination. Credit by examination is a method by which postsecondary credit is earned based on the receipt of a specified minimum score on a nationally standardized general or subject area examination.

Students may obtain more information about any of these opportunities for acceleration from their school counselors.

HOMEWORK POLICY

Regular, purposeful homework is an essential part of a student's education. Homework is an integral factor in fostering the academic achievement of students and in extending school activities into the home and community. Regular homework provides opportunities for developmental practice, drill, the application of skills already learned, the development of independent study skills, enrichment activities, and self-discipline. Homework should provide reinforcement and an extension of class instruction. It should also serve as a basis for further study and preparation for future class assignments.

STUDENT RESPONSIBILITIES:

1. Completing assigned homework as directed and in the spirit in which it was assigned.
2. Returning homework to the teacher by the designated time.
3. Submitting homework assignments that reflect careful attention to detail and quality of work.
4. Devoting a minimum of 30 minutes each day to reading as an additional part of the homework assignment.

NOTE: Students can receive additional help through the Homework Helpers Program, which includes the Dial-A-Teacher program at (305) 995-1600, Monday through Thursday from 5:30 p.m. to 8:30 p.m., WLRN, Channel 17. Students may also access Miami-Dade County Public School's web page at: www.dial-a-teacher.com

PARENT(S)/GUARDIAN(S) RESPONSIBILITIES:

While it is understood that parents/guardians are not responsible for providing a great deal of assistance to their child in completing homework, there is still much that parents/guardians can do to promote good study habits. Parent(s)/guardian(s) responsibilities include:

1. Providing an environment conducive to study.
2. Providing continued interest and concern for the child's successful performance in school through encouraging and supporting the child in his/her performance of homework assigned.
3. Indicating an interest in assignments and assisting, if possible, when requested by the child, but not to include performing the work for the child.
4. Supporting the school in regard to the child being assigned homework.
5. Requesting assignments for the child when short-term absences are involved.

6. Assuring that the child reads for a period of at least 30 minutes each day in addition to any other assigned homework.

- Excerpted from School Board Rule 6Gx13-6A-1.23

ATTENDANCE POLICY*

There is probably no factor more important to successful school progress than regular school attendance. Students who are absent excessively from the instructional program will fall behind in academic achievement. Excessive school absenteeism can result in course failure.

The attendance policy is establishing by the School Board. Highlights of the attendance rules are as follows:

1. A secondary student accumulating ten or more unexcused class absences in an annual course or five or more unexcused absences in a semester course will be subject to the withholding of final credit, pending a student/parent-requested administrative screening and/or review of all absences by the attendance review committee.

   Students accumulating ten (10) or more absences in an annual course, or five (5) or more absences in a semester course, due to illness are required to have a note (on file at the school) from a physician in order to receive an excused absence.

2. An attendance review committee is established in each school. The committee consists of three or more school personnel who have the responsibility to review student attendance petitions during the last week of the course(s) and recommend the following:

   - Issuing of final grades;
   - Temporary withholding of final grades pending makeup assignments; or
   - Permanent withholding of final grades and credit.

3. The following are considered excused absences:

   - Student illness
   - Medical appointment
   - Death in family
   - Observance of a religious holiday or service when it is mandated for all members of a faith that such a holiday or service be observed
   - School sponsored event or activity previously approved
   - Other individual student absences or tardies beyond the control of the parent or the student as approved by the principal or designee

4. All other absences or tardies not listed above in Item 3 are considered unexcused.

5. The student is expected to:
    - Take advantage of his/her educational opportunity by attending all classes punctually on a daily basis.
    - Provide the school with a written explanation for any absence/tardiness.
    - The student is responsible for initiating the request to make-up work.
    - Request the make-up assignment for all excused absences/tardiness from his/her teachers upon his/her return to school or class. It should be noted that all class work, due to the nature of instruction, is not readily subject to make-up work.
    - Complete the make-up assignments for classes missed within a reasonable amount of time. Failure to make up all assignments will result in lower assessment of the student's academic and/or effort grade.
    - Submit a completed "Petition to Appeal Withholding of Final Passing Grades" to the individual responsible for the screening process: 1) Provide written documentation for all absences to the attendance review committee. 2) Appear before the committee at the scheduled time with a parent or guardian.
6. The parent is expected to:
    - Report and explain an absence to the school.
    - Be responsible for his/her child's school attendance as required by law.
    - Be aware that tardiness places his/her child's learning in jeopardy and interrupts the learning of other students.
    - Stress the importance of regular and punctual school attendance with his/her child.
    - Personally contact the school after his/her child's fifth (5^{th}) aggregate absence.
    - Assist his/her child with the completion of the "Petition to Appeal Withholding of Final Grades."
    - Appear before the attendance review committee at the scheduled time to provide information relating to his/her child's absences.
7. **Block or Flexible Schedules for Reporting Class Absences of Secondary Students**: A double blocked period constitutes **two single class periods**. If a student is absent from a double blocked period, this will constitute two excused or unexcused absences for that class.

* Excerpted from School Board Rule 6Gx13-5A-1.04

ELIGIBILITY REQUIREMENTS FOR PARTICIPATION IN INTERSCHOLASTIC EXTRACURRICULAR ATHLETICS AND ACTIVITIES

In order for a student to participate in extracurricular athletics and activities, a student must meet the standards set forth by Section 1003.43 (1), Florida Statutes, policies of the Greater Miami Athletic Conference (GMAC), and Miami-Dade County School Board rules. In addition, a student must comply with the school district's Contract for Student Participation in Interscholastic Competitions or Performances, FM-7155. To be eligible to participate in interscholastic extracurricular student athletics and activities a student must
maintain an unweighted cumulative grade point average (GPA) of 2.0 or above on a 4.0 scale in the courses required for graduation. The student must also maintain a 2.0 GPA in conduct for the previous semester. Computation of grade point averages requires the inclusion of all applicable high school courses to which a forgiveness policy has been applied.

A student shall be eligible during the first semester of his/her ninth-grade year provided that it is the student's first entry into ninth grade and he/she was regularly promoted from eighth grade the immediate preceding year.

If a student becomes ineligible during the second semester of his/her ninth-grade year or during the first semester of his/her 10th-grade year because the student's cumulative grade point average was below 2.0 at the conclusion of the previous semester and continues to be below 2.0 at the conclusion of the semester of ineligibility, he/she may regain his/her eligibility for the following semester provided:

(a) the student signs an academic performance contract with his/her school at the beginning of the semester in which he/she is ineligible that states, at a minimum, that the student will attend summer school, or its graded equivalent, AND

(b) earns a grade point average of 2.0 or above on a 4.0 unweighted scale or its equivalent in all courses taken during the semester of ineligibility.

Once a student enters grade 11, he/she must have and maintain from that point forward a 2.0 or above cumulative grade point average on a 4.0 scale, or its equivalent, in all courses required for graduation at the conclusion of each semester to be eligible to participate during the following semester.

If a student's eligibility is affected by an incomplete grade, the student is ineligible until the incomplete grade is removed and all eligibility requirements are met.

All students participating in interscholastic athletic competition or who are candidates for an interscholastic team(s) are required to pass an annual medical evaluation and purchase the School Board's sponsored insurance program prior to engaging in any practice, tryout, or pre- or post-season physical activity associated with the student's candidacy for an interscholastic athletic team.

A student shall be eligible for no more than four (4) consecutive academic years from the date he/she first enrolls in the ninth grade. Four years from the date he/she first

enrolls in the ninth grade, he/she shall become ineligible for further interscholastic athletic competition. For students enrolled in either one of the two accelerated graduation programs, once they have met all the graduation requirements, they cannot remain
in high school for a fourth year in order to continue eligibility to participate in high school athletics/activities. The school athletic director and guidance counselor can assist students in planning a program of study that will include the appropriate courses to prepare for college entrance examinations and meet core course requirements for participation in National Collegiate Athletic Association (NCAA) athletic programs. They can also assist students in determining how to calculate the GPA required to be eligible to participate in NCAA athletics and advise the student regarding which courses do not meet NCAA eligibility requirements.

STUDENT RIGHTS AND RESPONSIBILITIES*

GRADES

PHILOSOPHICAL BASIS – Grades, at best, are but an indicator of the student's knowledge or skill at any particular time. Grades are not necessarily an accurate gauge as to whether learning has taken place. However, since much emphasis is placed upon grades, a student's academic grade should reflect the teacher's most objective assessment of the student's academic achievement. Academic grades should not be used as a threat in order to maintain classroom decorum.

RIGHTS	RESPONSIBILITIES
- Students have the right to be informed of the teacher's grading criteria, which are consistent with district guidelines, at the beginning of each grading period.	- Students have the responsibility for asking teachers in advance of a graded assignment for an explanation of any grading criteria or practice which they may question or which may need clarification.
- Students have the right to receive an academic grade that reflects their achievement.	- Students have the responsibility for maintaining reasonable standards of academic performance commensurate with their ability.
- Students have the right to be notified anytime during the grading period when it becomes evident that the student is performing unsatisfactorily in academics, conduct, or effort; or prior to the seventh week of a grading period, if an unanticipated reduction in performance becomes evident in academics, conduct, or effort.	- Students have the responsibility for making every effort to improve their performance upon receipt of notification of unsatisfactory performance.
- Students have the right to receive a conduct and effort grade in each class consistent with their overall behavior and effort.	- Students have the responsibility for conducting themselves in each class in ways that are conducive to the learning process.
- Students have the right to achieve academic success based upon their initiative and ability without interference from others.	- Students have the responsibility for earning grades based upon their performance while guarding against cheating by other students.

* Excerpted from the Code of Student Conduct (Secondary)

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act (FERPA) is a federal law. The intent of this law is to protect the accuracy and privacy of student educational records. Under this law, parents/legal guardians have the right upon request, to inspect, release, and challenge information contained within the student's educational interest will have access to confidential and other kinds of information contained in those records. The Board approved directive for implementing the provision of the Family Educational Rights and Privacy Act is contained in the document "Student Educational Records," and is available at http://www.ehandbooks.dadeschools.net/policies/91/ser.

FERPA's legal statute citation can be found in the U. S. Code of Federal Regulations for Title 34; (20 USC section 1232g; 34 CFR Part 99).

Education records include a range of information about a student that is maintained in schools in any recorded way, such as handwriting, print, computer media, video or audiotape, film, microfilm, and microfiche. Examples are:

- Date and place of birth, parent(s) and/or guardian addresses, and where parents can be contacted in emergencies;
- Grades, test scores, courses taken, academic specializations and activities, and official letters regarding a student's status in school;
- Special education records;
- Disciplinary records;
- Medical and health records that the school creates or collects and maintains;
- Documentation of attendance, schools attended, courses taken, awards conferred, and degrees earned;
- Personal information such as a student's identification code, social security number, picture, or other information that would make it easy to identify or locate a student.

Personal notes made by teachers and other school officials that are not shared with others are not considered educational records. Additionally, law enforcement records created and maintained by a school district law enforcement unit are not education records.

Parent(s)/legal guardian(s) are guaranteed the right, upon request, to inspect and review their children's records and to obtain copies of them under federal and state laws. Parent(s)/legal guardian(s) are guaranteed a right of "meaningful" access to copies of their children's records. The parent's rights extend to any lawyer, lay person, or advocate whom the parent(s)/legal guardian(s) authorizes to represent him or her. Access must be granted within 30 calendar days from the initial request.

NOTE: The Florida Department of Education (and all State education agencies) is required to afford parents/guardians and students who are 18 years of age or older to access educational records the State agency maintains, e.g., state achievement tests.

MAST CURRICULUM

ACADEMIC PROGRAM/PURPOSE—MAJORS CONCEPT

The MAST Academy offers students the opportunity to pursue a rigorous course of study in one of three academic majors: **Marine Studies and Culture, Maritime Related Industries,** or **Oceanic and Atmospheric Science Technology**. Students determine an area of interest and declare a major at the end of their freshman year. They select their courses from a menu of core classes and required electives. A balanced academic program emphasizes marine-theme interdisciplinary study, reading and writing across the curriculum, scientific inquiry, science and maritime career experiences, critical thinking, cooperative learning projects, and technology applications. The academic program prepares a diverse student population for college study and career placement.

To earn a major and the distinction of an additional seal on the diploma recognizing the rigor of the curriculum major, a student must earn at least a "C" in each of six (6) major elective classes within the declared major field and in one of the following: Executive (District) Internship/MAST Internship, or two years of research.

MAST ACADEMY COURSE/SEQUENCE REQUIREMENTS, GRADES 9 THROUGH 12

Courses	Grade 9	Grade 10	Grade 11	Grade 12	Total
Language Arts	1	1	1	1	4
Math	1	1	1	1	4
Science	1	1	1	1	4
Social Studies	1		1	1	3
Health-Life Management	.5				.5
Personal Fitness **	.5	.5			1
Technology in the Classroom/Critical Thinking Skills *	1*				1
Major	1	2	2	2	7***
General Electives	1	1.5	1	1	4.5 **** *****
Total	8	7	7	7	29

* Required summer prior to entering 9th grade.

** Required one (1) full year of physical education to include Personal Fitness (.5 credit) and .5 credit of an additional approved physical education curriculum.

*** Includes Executive (District)/MAST Internship or two years of Intel Research.

**** Two (2) years of a consecutive foreign language study are required for admission into a college/university in the Florida State University system.

***** Performing art and vocational requirements are to be included as a general elective.

MAJOR: MARITIME RELATED INDUSTRIES (MRI)

- Students must complete six major electives with a "C" or better.
- Students must complete MAST/Executive Internship, or two years of research or Independent Research with a "C" or better.
- Required courses will not earn credit towards a major.
- Florida Bright Futures can yield a scholarship valued up to $10,000 based upon specific course completion and grade requirements.
- **Graduation requirements:** Health/Personal Fitness (1), Fine Arts (0.5), Practical Art (0.5)
- **Five MRI Programs:** Culinary Operations, JROTC, Industrial Arts, Computer Technology, Engineering
- **Gold Seal Program Scholarships ~ See Florida Financial Aid for specific awards.**
- Courses used to meet one major many not be used to meet a second major.

MAJOR ELECTIVES	PREREQUISITES	GENERAL ELECTIVES (FROM THIS DEPARTMENT)	PRE (OR CO) REQUISITES
Culinary Operations I, II, III *	Prior Level (except level I)		
Hosp. Mgt. and Culinary Arts */ Blueprint for Success	Culinary Operations I	Intermediate Swimming	
Material & Processes I – III	Prior Level (except level I)	Water Safety	Intermediate Swimming
JROTC I – IV	Prior Level (except level I)		
Web Design I, II --- **Computer Programming I, II**	Computer Literacy & Requirements for online courses		
AP Computer Science	Computer Program I, II		
Engineering Technology I, II *	Algebra I	**General Electives** **(from other departments)** **Select from elective offerings in MRI or MSC**	
DE: Introduction to Engineering	DE Requirements		
Interm. Swimming/ Ind. & Dual Sports			
Water Safety, Ind. & Dual Sports	Interm. Swimming/Ind. & Dual Sports		
DE: Oceanography	DE Requirements		
Any AP Math/Sci Course			

* Gold Seal Scholarship Program Course(s)

Several examples of course sequences that meet the Bright Futures Gold Seal Scholarship requirements:

GRADE 9	GRADE 10	GRADE 11	GRADE 12
Example 1 Culinary Operations I	Culinary Operations II	Culinary Operations III	Internship/Dual Enrollment Hospitality Management
Example 2 Engineering I	Engineering II 2008-2009	Engineering III 2009-2010	DE Engineering
Example 3 Materials & Processing I	Materials & Processing II	Materials & Proc. III	

MAJOR: MARINE STUDIES & CULTURE (MSC)

- Students must complete six major electives with a "C" or better
- Students must complete MAST/Executive Internship or two years of research, with a "C" or better
- Required courses will not earn credit towards a major
- Florida Bright Futures can yield a scholarship valued up to $10,000.00 based upon specific course compilation and grade requirements.
- Courses used to meet one major may not be used to meet a second major

GRADUATION REQUIREMENTS

GRADE 9	GRADE 10	GRADE 11	GRADE 12
English I (H)	English II (H)	English III (R, H, or AP)	English IV (R, H, or AP)
World History (H)		Amer. History (H, or AP)	Govt. & Econ. (H or AP)

MAJOR ELECTIVES	PREREQUISITES	GENERAL ELECTIVES (FROM THIS DEPARTMENT)	PREREQUISITES
Computer Graphic Art I			
Computer Graphic Art II	Computer Graphic Art I	Steel Drum Band I	
Journalism I - IV (Yearbook or Newspaper)	Permission of Instructor	Instrumental Ensemble	
Steel Drum Band II,III,IV	Steel Drum Band I	Ceramics	
Sea Classics I, II			
Field & Environmental Writing (I,II) (III)			
Spanish III Honors			
AP Spanish			
French III Honors			
AP French			
Web Design I, II	Computer Literacy & Requirements for Online Courses		
Theater History & Literature / Film I, II			
		General Electives (from other departments) Select from elective offerings in MRI or OAS	
AP Art History	11th or 12th Grade		

Several examples of major course sequences follow:

	Grade 10	Grade 11	Grade 12
Example 1	Steel Drum Band I, II	Steel Drum III	Steel Drum IV
Example 2	Journalism I	Journalism II	Journalism III
	Field & Environmental Writing I and II	Sea Classics I	Sea Classics II

MAJOR: OCEANIC & ATMOSPHERIC SCIENCE TECHNOLOGY

- Students must complete four (4) mathematics courses at MAST Academy.
- Students must complete six (6) science courses at MAST Academy, students must complete six (6) major electives with "C" or better (See math and science flow chart)
- Courses used to meet one major may not be used to meet a second major
- Internship or research requirement

SCIENCE COURSES		MATHEMATICS COURSES	
REQUIRED SCIENCE COURSES	**MINIMUM PREREQUISITES**	**REQUIRED MATHEMATICS COURSES**	**MINIMUM PREREQUISITES**
Earth and Space Science		Algebra I	M/J II or M/J III
Biology R or H		Geometry R or H Algebra II R or H	Algebra I Algebra I, Geometry
Chemistry R or H		Advanced Topics in Math Pre-Calculus	Algebra II Algebra II
MAJOR SCIENCE ELECTIVES	**MINIMUM PREREQUISITES**	**MAJOR MATHEMATICS ELECTIVES**	**MINIMUM PREREQUISITES**
Environmental Science	Biology	**Adv. Topics in Math**	Algebra II
Marine Science H I, II	Biology, Chemistry	**Pre-Calculus**	Algebra II
Physics R or H, and AP	Algebra II or higher	**Calculus**	Pre-Calculus
Solar Energy I H	Physical or Earth and Space Science	**AP Calculus AB**	Pre-Calculus
Solar Energy II H	Solar Energy I	**AP Statistics**	Algebra II Honors
Intel/ Marine Research	Approved by Application	**Discrete Mathematics**	Algebra II Honors
AP Environmental Science	Biology and Honors Chemistry, or Environmental Science		
AP Biology	Biology, Chemistry		
AP Chemistry	Honors Chemistry		
DUAL ENROLLMENT COURSES	**MINIMUM PREREQUISITES**	**OTHER COURSES**	
Introduction to Engineering/Auto CAD	Junior or Senior status 3.0 GPA Algebra II		
Natural History of S. FL / Social Issue in Biology	Junior or Senior status, 3.0 GPA Chemistry		
Solar Energy II	Junior or Senior status, 3.0 GPA		
Astronomy/Physical Geology	Junior or Senior status, 3.0 GPA Chemistry		

FOREIGN LANGUAGE

MAST Academy freshmen begin to meet graduation requirements and explore career majors in their first year. Foreign language courses may be taken in grades 9 through 12.

French I, #070132001: The purpose of this course is to introduce students to the French language and culture and to develop communicative skills and cross cultural understanding. The content should include, but 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**

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, while oral communication remains the primary objective. **Prerequisite:** French II. **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. Student's acquisition of grammatical concepts is strengthened by analyzing reading selections. Contemporary vocabulary stresses activities that are important to everyday life of French-speaking people. **Prerequisite:** French I. **Annual Course**

French AP Language, #070138001: This course develops reading and listening comprehension, and emphasizes written and oral fluency in preparation for the AP French Language examination. It is designed for students who have completed at least French III. **Prerequisite:** Teacher Recommendation. **Annual Course**

Spanish I, #070834001: This course introduces students to the Spanish language and culture and develops communicative skills and cross-cultural understanding. The content includes beginning skills in listening and speaking with special attention to pronunciation. An introduction to reading and writing is also included, as well as fundamental 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 while oral communication remains the premier objective**. 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. The course includes a national standardized test, the Spanish Assessment. **Prerequisite:** Spanish II for non-native speakers or Spanish I for native speakers or counselor placement. **Annual Course.**

Spanish for Spanish Speakers I, #070930001: 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**

Spanish for Spanish Speakers II, #070931001: 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**

Advanced Placement Spanish Language, #070840001: 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:** Teacher Recommendation. **Annual Course**

LANGUAGE ARTS

English Honors I, #100132001: This course promotes academic excellence in English Language Arts through enriched experiences in literature, writing, speaking, and listening. The content includes instruction in the critical analysis of major literary genres. Composition instruction focuses upon using the writing process in creative, logical, and critical modes, and includes frequent practice in all aspects of the writing process. Formal speaking experiences are provided, and the critical skills of listening and observing are taught. **Annual Course**

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 upon verbal analogies and other patterns commonly found on standardized tests. **Prerequisite:** See English Course Assessment Criteria. **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:** See English Course Assessment Criteria. **Annual Course**

Advanced Placement English Language & Composition, #100142001: This course provides students with an understanding of the semantic, structural and rhetorical resources of the English Language as they relate to the principles of effective writing. The course is also designed to provide students with a variety of writing opportunities calling for the use of different styles and tones. The content should include that determined by the College Board AP Program. **Prerequisite:** See English Course Assessment Criteria. **Annual Course**

English Honors IV, #100141001: This course promotes academic excellence in English Language Arts through enriched experiences in communication skills and through instruction in world literature and other appropriate literature as a part of our literary heritage. The content should include instruction in the written and oral analysis of major British literary works of various genres in relationship to cultural influences and the development of the literary traditions of the English language. Composition instruction should emphasize writing assignments that develop students' abilities to analyze critically and to interpret information. Opportunities should also be given for students to extend speaking, listening, and viewing skills. Language students should include vocabulary development and an overview of the history of the language as reflected in literature. **Prerequisite:** See English Course Assessment Criteria. **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:** See English Course Assessment Criteria. **Annual Course**

Field & Environmental Writing I, #100932001: The purpose of this course is to to develop students' writing and language skills for individual expression in literary forms. The content includes the instruction in the development and practice of writing a variety of literary works, including original poetry, short stories, plays, novels, and/or essays and other non-fiction. The course also includes technical aspects of publishing students' work in a literary publication. **Prerequisite:** Field & Environmental Writing I. **Annual Course**

Journalism I, #100630001: This course provides instruction in basic aspects of journalism and workshop experiences in journalistic production. The content should include instruction in recognizing and writing news for journalism as well as workshop experiences in photography, layouts, advertising, printing, and other practical aspects of journalistic enterprise. In connection with workshop experiences, one or more student journalistic productions may be included. Various aspects of journalistic production may be taught through workshop experiences and/or simulations. **Requirements:** "A" or "B" in English & Teacher Recommendation. Specify Yearbook or Newspaper. **Annual Course**

Journalism II, #100631001: 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:** Journalism I, "A" or "B" in English & Journalism teachers' recommendation. Specify Yearbook or Newspaper. **Annual Course**

Journalism III, #100632001: 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:** Journalism II, "A" or "B" in English & Journalism teachers' recommendation. Specify Yearbook or Newspaper. **Annual Course**

Journalism IV, #100633001: 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. **Pre-requisite:** Journalism II, "A" or "B" in English and Journalism teachers' recommendation. Specify Yearbook or Newspaper. **Annual Course**

Film I, # 010741001; Film II # 010742001 : This course engages with all forms of moving-image culture, exploring the most popular media forms of the 20th and 21st centuries (film and still photography) and the most exciting new media form of

the new century (digital media). Students will think historically, theoretically, and analytically about a wide range of images and narratives within the broad context of humanistic studies. Course includes production opportunities utilizing digital media. **Annual Course**

Technology in the Classroom, #050092001: The purpose of this course is to promote student use of computers and related technology to make learning and instruction more effective and efficient. It encourages students to blend critical thinking skills and technology to improve their educational environment. Students will investigate new areas of technological development that will make an impact upon the future of education. The content should include, but not be limited to the following: computer components and terminology; nature of computers and their impact on society; computer capabilities and limitations; use of technology in curriculum and instruction; computer assisted instruction; computer languages; educational computer applications.

Critical Thinking and Study Skills, #170037001: This purpose of this course is to provide the foundation for and practice of good study habits and to develop the skills needed to process information, complete assignments accurately and perform well on tests. The content includes, but is not limited to note taking, time management, test-taking techniques, organizational skills, listening skills and critical thinking skills. **Prerequisite:** None. **Semester Course**

FINE ARTS

Art 2D Comprehensive 1 / Art 3D Comprehensive 1, #010130001 / #010133001 The purpose of this course is to provide students with opportunities to develop a basic understanding of artistic expression and ideas through two and three dimensional media. The content will include development of an awareness of the environment, exploration of ideas involving individual's intellectual, emotional, social, and perceptual growth. This course will involve a variety of media including digital photography, painting, drawing, and ceramics.

Computer Art I--Applications to Painting, #010337001: This course provides experiences in the applications of computer-generated imagery to a variety of painting methods. The content should include identification and application of the methods for making aesthetic, critical, and technical judgments regarding computer-generated imagery; identification and investigation of a variety of painting methods and materials; and documentation of the history of computer imagery in painting. **Prerequisite:** None. Series of two (2) semester courses.

Computer Art II, #010335001: The purpose of this course is to provide the student with experiences in the identification of the systems and processes of computer image processing. The content should include, but limited to, introduction to and investigation of appropriate image-processing; history of the development of computer-aided image processing in art and industry; perception and response to computer-processed images, identification and investigation of the methods for making technical critical and aesthetic judgments regarding computer-processed images. **Prerequisite:** Computer Art I

Ceramics and Pottery I, II, #010230001, Art 3D Comprehensive I, #010133001: The purpose of this course is to give students a basic understanding of ceramic processes. The content should include, but not be limited to, the composition and treatment of clay products: qualities of art in different forms and styles of clay products; the recognition of properties, limitations and possibilities of clay construction through hand-building techniques; use of clay bodies, glazes, tools, and techniques in producing clay products; investigation of decorating techniques; development of skills with ceramic tools; examination of qualities of finished products made by professionals, study of vocabulary relating to ceramics and pottery; and defense of aesthetic judgments about works of art produced in clay. **Prerequisite:** None. **Pairing of two (2) semester courses.**

Advanced Placement Art History, #010030001: The purpose of this course is to give students an advanced understanding of the history, practice, and enjoyment of art through: perceiving and responding to the qualities of art, valuing art as an important realm of human experience, knowing about the history of art and its relationship to other processes and periods, and making and justifying judgments about aesthetic merit and qualities of works of art. **Prerequisite:** World History. **Annual Course**

PERFORMING ARTS

Beginning Steel Drum Band (Instrumental Techniques I, II), #130242001/#130243001: This class provides instrumental instruction in a class setting. The emphasis of the class is on learning to play the steel drum. This is an excellent class for those who want to continue their middle school music training, or for those who have always wanted to play an instrument. This class requires playing in the December and May concert, as well as performing at the Coconut Grove Arts Festival, the Key Biscayne Arts Festival, and Beaux Arts Festival. **Prerequisite:** None**. Pairing of two (2) semester courses.**

Advanced Steel Drum Caribbean Music Ensemble (Instrumental Techniques III & IV), #130244001 & #130245001: The purpose of this course is to provide instrumental instruction in a class situation. **All students will play steel drum.** In addition, students who own their own instruments (saxophone, trumpet, violin, guitar, keyboard, etc.) will be encouraged to play their instruments in the ensemble. This class is appropriate for students who have achieved a high level of proficiency on a musical instrument. **Prerequisite:** Permission of instructor, musical audition, and referral by a music teacher.

Instrumental Ensemble I, #130246001: This course provides students with the opportunities for performance in specific instrumentations through the study of appropriate literature. The content includes, but is not limited to ensemble concepts in balance, blend and stylistic interpretation of varied music. It provides for development of musical independence necessary for ensemble performance. **Prerequisite:** Instructor approval required.

SOCIAL STUDIES

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. Students must complete and present one research paper each nine-week period. This will count for 10% of the nine- weeks grade. Topics are to be selected from the units studied during the nine-weeks period. Topics must be approved by the instructor and include a Power Point presentation. Students are also required to complete one book report each nine-weeks. Book reports will count for 10% of the nine-weeks grade. Books must be approved by the instructor and pertain to the units being studied during the nine-week period. **Annual Course**

American History Honors, #210032001: This course provides students with the opportunity to acquire a comprehensive understanding of the chronological development of the American people by examining the political, economic, social, religious, military, scientific, and cultural events that have affected our nation. Content includes analysis of significant trends in the development of American culture and institutions; evaluation of westward expansion; origin and development of American ideals; interpretations of the effects of American colonial experiences; analysis of the Declaration of Independence, U.S. Constitution, and Bill of Rights; analysis of sectionalism and origin; course and aftermath of the Civil War; comparisons of the technological and urban transformations; interpretations in changes in lifestyles; analysis of changes in foreign policy from regional to global; foreign issues. Completion of credit in this course precludes the earning of credit in American History or Advanced Placement American History. **Annual Course**

Advanced Placement American 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 advanced placement program. **Annual Course**

American 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, #210232001: 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 Microeconomics, #210236001: The purpose of advanced placement microeconomics is to provide students with the opportunity to analyze the behavior of individual households, firms and markets, how prices and outputs are determined in those markets, and how the price mechanism allocates resources and distributes income. Specific content to be covered will include, but not be limited to, an understanding of fundamental economic concepts including scarcity, opportunity costs and trade-offs, productivity, economic systems and institutions, and exchange, money and interdependence. The analysis of microeconomic

concepts includes markets and prices, supply and demand, competition and the market structure, income distribution, market failure, and the role of government. Completion of credit in this course precludes earning subsequent credit in Economics, Economics Honors, or Economics Honors Gifted, A.P. microeconomics gifted. **Semester Course**

Special Topics Seminar, #170033011

The purpose of this interdisciplinary course is to expand previously acquired skills in research, data collection and analysis, and sustained argument, and to teach students how to coordinate major papers, related projects, and seminar presentations. Seminar assignments will include readings in science, philosophy, and literature. Students will be expected to participate in Harkness-style** discussions of readings and presentations.

The Harkness method is a way of learning: everyone comes to class prepared to share, discuss, and discover, whether the subject is a novel by William Faulkner or a topic in the history of science. There are no lectures. It's a way of being: interacting with other minds, listening carefully, speaking respectfully, accepting new ideas and questioning old ones, using new knowledge, and enjoying the richness of human interaction. It's fun; it's exhilarating; it's the way to be. (from the Phillips Exeter website). Restricted to juniors and seniors but open to all majors. Instructor approval required. **Annual course**

MARITIME RELATED INDUSTRIES

AQUATIC SPORTS & HEALTH OPERATIONS

Personal Fitness, #150130001: 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. The content also includes American Red Cross Swimming levels I, II, and III and Basic Water Safety. Swimming Level III is a prerequisite for all water-based academic research, underwater classes and advanced physical education classes at MAST Academy. This course is required for graduation by the State of Florida**. Prerequisite:** None. **Semester Course**

Health and Life Management Skills, #080030001: This course provides students with opportunities to develop and enhance critical life management skills necessary to make sound decisions and take positive actions for health and effective living. Content includes positive emotional development; communication, interpersonal and coping skills; responsible decision-making and planning; nutrition and weight management; substance misuse, knowledge and skills needed to be a wise consumer; community resources, performance of one-rescuer cardiopulmonary resuscitation (CPR) and first aid for obstructed airway. This course includes materials on HIV/AIDS; human sexuality, and pregnancy prevention. This course is required for graduation by the State of Florida. **Prerequisite:** None. **Semester Course**

Beginning Swimming, #150446001: The purpose of this course is to provide students with opportunities to acquire knowledge and skills in basic swimming strokes and safety practices that may be used in recreational pursuits today as well as in later life and maintain and/or improve their personal fitness. The content should include, but not be limited to, knowledge and application of body position, buoyancy, relaxation, breath control, and coordination related to the basic swimming strokes and safety practices and basic survival skills. Skill acquisition. The maintenance and/or improvement of personal fitness should be stressed. **Prerequisite:** None. **Semester Course**

Intermediate Swimming (and Snorkeling), #150447001: This one-semester 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. The content will include the further development of swimming strokes levels IV and V, knowledge of basic water rescue, community first aid, and CPR. Snorkeling skills are included. Skill acquisition and the maintenance and/or

improvement of physical fitness are stressed. **Prerequisite:** Personal Fitness. **Semester Course**

Individual and Dual Sports I, #150241001: In this one semester course 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. **Prerequisite:** Red Cross Swimming Level IV or Intermediate Swimming or recommendation from the instructor. **Semester Course**

Water Safety, #150449001: This one semester course provides students with opportunities to acquire knowledge and skills in water safety activities that maybe used today as well as in later life, and maintain and/or improve their personal fitness. The content will include 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. **Prerequisite:** Successful completion of Red Cross Swimming Level V or Intermediate Swimming or recommendation from the instructor. **Semester Course**

Individual and Dual Sports II, #150242001: This one-semester course provides students with opportunities to acquire knowledge of strategies and develop skills in 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. This course will include basic sailing and basic SCUBA. **Prerequisite:** Individual and Dual Sports I or recommendation from the instructor. A SCUBA certification fee is required. **Semester Course**

Beginning Weight Training, #150134001/Intermediate Weight Training, #150135001: 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. **Prerequisite**: Personal Fitness. **Semester Course**

HOSPITALITY AND FOOD OPERATIONS

Culinary Operations I, # 851521001: This is a beginning course in the food production and services. Instruction includes orientation to the food service industries; personal health and hygiene; identification, selection and care of the commercial equipment and tools; food service technology; nutrition; meal planning; purchasing and storage of food; safety and sanitation procedures; principles and methods of basic food preparation; and evaluation of food products. This course satisfies the student's Practical Arts graduation requirement. **Prerequisite:** None. This course is a requirement for the FLORIDA GOLD SEAL Endorsement. **Annual Course**

Culinary Operations II, # 851522001: This course assists students in identifying training requirements, job responsibilities, and operational procedures and functions; demonstrating communication and employability skills and preparing bake station, fry station, pantry and hot station items. Students will continue their hands-on training by preparing and serving meals for MAST Academy's Fish Tales Café. **Prerequisite:** Culinary Operations I. This course is a requirement for the FLORIDA GOLD SEAL Endorsement. **Annual Course**

Culinary Operations III, # 851523001: This course assists students to identify career options, trends, and operational procedures; to demonstrate meal service activities, employability and merchandising skills, and cost and portion control of food; and to prepare bake stations, pantry, and hot station items. Students refine their hands-on training by preparing and serving meals for MAST Academy's Fish Tales Café. **Prerequisite:** Culinary Operations II. This course is a requirement for the FLORIDA GOLD SEAL Endorsement. **Annual Course**

Blueprint for Success # 850037501: The purpose of this course is to assist students in making informed decisions regarding their future academic and occupational goals. This includes a broad range of careers in family and consumer sciences. The concept includes, but is not limited to, personal decision making as it applies to careers, occupations and entrepreneurial opportunities. **Annual course**

COMPUTER EDUCATION

Introduction to Information Technology, #820731001: This course is designed to provide an introduction to information technology concepts and careers as well as the impact information technology has on the world, people, and industry and basic web design concepts. The content includes information technology career research; operating systems and software applications; electronic communications including email and Internet services; basic HTML, DHTML, and XML commands; emerging technologies; and Web page design.

Web Design and Internet Programming I, #820711001: The purpose of this course is to introduce the student to Internet usage and designing web pages. The content will include, but is not limited to, an exploration of commercially available software and its applications. Topics will include demonstrations and utilization of software programs, word processing, computer graphics, authoring language, and telecommunications. Student must meet requirement for on-line courses.

Prerequisites: Computer literacy. **Annual Course**

Web Design II, #820712001: This course provides advanced concepts for internet, intranet, and web design. The content includes internet/intranet tools, web site promotion, advanced html commands, advanced page design, and multimedia applications. **Prerequisites:** Web Design I, Computer literacy. **Annual Course.**

Advanced Placement Computer Science, #020032001: This course is a college-level computer course covering the applications of computing within the context of programming methodology, algorithms, and data structures. Student must meet requirement for on-line courses.

UNITED STATES COAST GUARD JUNIOR RESERVE OFFICERS TRAINING CORP (USCG JROTC)

Maritime Science I, #180432001: JROTC provides a forum for the development and application of leadership and teambuilding skills. This is accomplished by enhancing the classroom education with the weekly Leadership Lab. The JROTC cadets are organized in a hierarchical structure whereby cadets earn the privilege of moving into leadership positions and assuming responsibility for the development of cadets subordinate to them. Additionally, the ROTC is organized into a functional structure to allow cadets to excel in a variety of areas including Operations, Logistics, and Public Affairs. This course is an introduction to the USCG and military service in general. It will include 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. Military drill and physical fitness are integral parts of this course. **Prerequisite:** None. **Annual Course**

Maritime Science II, #180433001: JROTC provides a forum for the development and application of leadership and teambuilding skills. This is accomplished by enhancing the classroom education with the weekly Leadership Lab. The JROTC cadets are organized in a hierarchical structure whereby cadets earn the privilege of moving into leadership positions and assuming responsibility for the development of cadets subordinate to them. Additionally, the JROTC is organized into a functional structure to allow cadets to excel in a variety of areas including Operations, Logistics, and Public Affairs. 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 and practiced using MS1 cadets as trainees. This course also covers small boat and ship handling theory, rules of the road, anchor and ground tackle nomenclature and basic weather knowledge. **Prerequisite:** Maritime Science I. **Annual Course**

Maritime Science III, #180434001: JROTC provides a forum for the development and application of leadership and teambuilding skills. This is accomplished by

enhancing the classroom education with the weekly Leadership Lab. The JROTC cadets are organized in a hierarchical structure whereby cadets earn the privilege of moving into leadership positions and assuming responsibility for the development of cadets subordinate to them. Additionally, the JROTC is organized into a functional structure to allow cadets to excel in a variety of areas including Operations, Logistics, and Public Affairs. This course provides in depth study into the art of navigating a vessel in local coastal/intercoastal waters or the high seas. Cadets will learn to become competent navigators through an in depth study of tides, currents, aides 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 high administrative and operational positions within the JROTC battalion and will exercise their leadership skills in the execution of their assigned duties. **Prerequisite:** Maritime Science II. **Annual Course**

Maritime Science IV, #180435001: JROTC provides a forum for the development and application of leadership and teambuilding skills. This is accomplished by enhancing the classroom education with the weekly Leadership Lab. The JROTC cadets are organized in a hierarchical structure whereby cadets earn the privilege of moving into leadership positions and assuming responsibility for the development of cadets subordinate to them. Additionally, the JROTC is organized into a functional structure to allow cadets to excel in a variety of areas including Operations, Logistics, and Public Affairs. This course provides cadets an opportunity for actual implementation of leadership, organizational and managerial skills that cadets have learned over the previous three years. MS4s are given high levels of responsibility and authority for the management of the entire JROTC 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. Celestial Navigation will be introduced. **Prerequisite:** Maritime Science III. **Annual Course**

TECHNOLOGY EDUCATON

Engineering Technology I #860057001: Engineering Technology introduces the student to the principles of fluid, thermal, electrical, and mechanical systems utilizing hands-on applications. Being able to communicate solutions to engineering problems graphically is an important part of the program. Students will be expected to work independently as well as part of a team. At higher levels, students will use a variety of tools to solve design problems. **Prerequisite:** Algebra 1 **Annual course**

Engineering Technology II #860067002 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 and 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 Technology III #860177001 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.

Basic Principles of Materials and Processes Technology (Wood Shop I) #860111013: This course provides instruction in basic competency development in the following areas: woods, metals, and plastics. Learning activities include the study of material; their properties and utilization as they are fabricated into usable products; and the hand and machine processes involving forming, conditioning, separating, and combining. Students will learn safety and operation of classroom equipment while completing a variety of projects. Projects will be related to several areas of interest including marine-theme designs, boat design, and furniture design. This course satisfies a student's Practical Arts graduation requirement. **Prerequisite:** None. This course is a requirement for the FLORIDA GOLD SEAL Endorsement. **Annual Course**

Intermediate Principles of Materials and Processes Technology, (Wood Shop II) #860112023: This course is designed to enable the student to make a more in depth study in the content areas listed in beginning materials processing industries. The class will concentrate on using wood, plastic, and metal fabrication. Projects will be related to marine-theme designs, boat design, and furniture design. This course satisfies a student's Practical Arts graduation requirement. This course is a requirement for the Florida Gold Seal Endorsement. **Prerequisite:** Basic Principles of Materials and Processes Technology. **Annual Course**

Advanced Principles of Materials and Processes Technology (Wood Shop III) #860113033: Provides the student with advance individual study related to the technology of fundamentals of industrial material processing industries, utilizing selected performance standards from the beginning and intermediate courses of the program. Materials used will include wood, plastic, and metal fabrication. **Note:** The student will be able to comply with the safety rules and regulations concerning equipment, materials and procedures in this program. Marine-theme projects will be designed. Honors level course. **Prerequisite:** Intermediate Principals of Materials and Processes Technology. This course is a requirement for the FLORIDA GOLD SEAL Endorsement. **Annual Course**

INTERNSHIP & LEADERSHIP

Advanced Academics Internship, I-IV, #170030011-170033011: This course provides juniors and seniors with an opportunity to apply technical skills and competencies to real life career processes and settings. M-DCPS authorized honors course; not state-authorized honors. Course content includes an analysis of career options, career planning processes, characteristics of work settings, theories of executive management, and organizational structure. Students will work five or more hours per week in non-paying jobs related to their major. The mentor will evaluate the student's job performance. Juniors can only receive one credit for this course (8^{th} period). Seniors can receive up to three credits for this course, if placement is off campus: 7^{th} or 8^{th} period (one credit), 6^{th} and 7^{th}, or 7^{th} and 8^{th} period (two credits), or 6^{th}, 7^{th}, and 8^{th} period (three credits). On-campus placements may be for any one period. **Prerequisite:** Junior/Senior, 3.0 or greater GPA, student-provided transportation. **Annual Course**

MAST Internship, #050030011: This course is MAST's required senior internship for student's whose GPA does not qualify them for an Advanced Academic Internship. Course content includes work ethics, resume writing, job interviewing, dress for success, business manners, team building, career planning, and other related topics. Students will work five or more hours per week in non-paying jobs related to their major. Mentors will evaluate the student's job performance. ATHLETES ARE ENCOURAGED TO TAKE THIS COURSE DURING THE SUMMER. Prerequisite: Seniors with under a 3.0 GPA, student-provided transportation. **Annual Course**

Leadership Skills Development, #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**

DUAL ENROLLMENT COURSES

Dual enrollment courses and curriculum are subject to change due to appropriate enrollment and instructor availability. Students registering for dual enrollment classes are required to have a minimum 3.0 unweighted grade point average and be of Junior or Senior grade placement.

Introduction to Culinary Arts, #FSS100501: Introduction to commercial food production, nutrition, standard product identification, and supervisory techniques in the area of food production. **Prerequisite:** Junior/Senior status, Culinary Operations I. **Semester Course**, combined with careers in Hospitality Management.

Careers in Hospitality Management, #HFT100101: Provides an overview of the

hospitality industry; history, problems, and general operating procedures. **Prerequisite:** Junior/Senior status, Culinary Operations I. **Semester Course,** combined with Introduction to Culinary Arts.

Introduction to Engineering I, #EGS11001C1: This course is an introduction to the profession of engineering. This is a discussion of the engineering design process. Includes problem formulation through evaluation of creative design through case studies. Focus also on the various kinds of technology utilized in engineering practice. **Prerequisite:** Algebra II. Two (2) semester courses comprised of .5 high school credit each semester. Additional requirements for dual enrollment registration.

AutoCad& Design, ETD133001: This course is an introduction to industry standard drafting and design practice with the assistance of CAD in a laboratory environment. This includes working drawing and design routines produced in the CAD system and executed to hard copy via plotter. **Prerequisite:** Algebra II. Two (2) semester courses comprised of .5 high school credit each semester. Additional requirements for dual enrollment registration.

OCEANIC & ATMOSPHERIC SCIENCE TECHNOLOGY

MATHEMATICS

Geometry, #120631001: This course emphasizes geometrical critical thinking and the deductive method to mathematical situations. Topics shall include logic and reasoning; introduction to formal proofs; the study of Euclidean geometry of lines, planes, angles, triangles, similarity, congruence, geometric inequalities, tessellations, coordinate geometry, circles, area and volume; and some construction using compass and straight edge. **Prerequisite:** "C" or better in Algebra* I. **Annual Course**

Geometry Honors, #120632001: This course gives a rigorous in depth study of geometry with emphasis on methods of proof and the formal language of mathematics. Topics shall include Euclidean, non-Euclidean, and fractals structure of geometry; angle concepts; triangles; quadrilaterals; proofs, perpendicularly and parallelism in a plane and in space; similar polygons; circles and spheres; constructions; area and volume; coordinate geometry, basic trigonometry, and transformational geometry. **Prerequisite:** "B" or better in Algebra I . **Annual Course**

Algebra II, #120033001: This course continues the study of the structure of Algebra and provides the foundation for applying these skills to other mathematical and scientific fields. Topics shall include the review and extension of the structure and properties of the real number system; relations, functions and graphs; polynomials and rational expressions; quadratic equations and inequalities; polynomial functions; rational and irrational exponents; logarithms; complex numbers; and problem solving. **Prerequisite:** "C" or better in Geometry/Algebra I *. **Annual Course**

Algebra II Honors, #120034001: This course presents an in depth study of the topics of Algebra II with emphasis on theory, proof, and development of formulas, as well as their applications. Topics shall include algebraic structure; first-degree equations in one and two variables solved algebraically and graphically; systems of equations and inequalities; functions and relations; polynomials and rational expressions; exponents and radicals, logarithms; complex numbers; conic sections; polynomial equations; sequences and series; permutations, combinations and probability; and matrices. **Prerequisite:** "A" or "B" in Geometry and Algebra I *. **Annual Course**

Advanced Topics in Mathematics, #129831001: The purpose of this course is to enhance and continue the study of mathematics after Algebra I, II, and Geometry and provide a college level foundation to students not aspiring to a math, science, or technical major. The content should include, but not be limited to, the following: fundamental concepts of logic, including Venn diagrams; structure and properties of the real and complex number systems; explorations of geometric relationships involving circles; relations, functions, and graphs extended to polynomial, exponential, and logarithmic functions; data analysis concepts and techniques, including introductory statistics and probability; arithmetic and geometric sequences and series; operations with matrices; introduction to trigonometric

functions and their applications, including both right and oblique triangles; conic sections and their applications. **Prerequisite:** "C" or better in Algebra I, Geometry, and Algebra II. **Annual Course.**

Pre-Calculus Honors, #120234002: This course emphasizes the study of functions and other skills necessary for the study of calculus. Topics shall include polynomial, rational, exponential, logarithmic, and circular functions, and their inverses; sequences; series; theory of limits; vectors; conic sections; polar coordinates; symbolic logic; mathematical induction; and matrix algebra. **Prerequisite:** "C" or better in Advanced Topics in Math or "B" or better in Algebra II Honors or "A" in Algebra II Regular *. **Annual Course**

Calculus Honors, #120230001: The purpose of this course is to provide a foundation for the study of advanced mathematics. Topics shall include elementary functions; limits and continuity; derivatives; differentiation; applications of the derivative; anti-derivatives; definite integrals; and applications of the integral. Graphing calculator is required. **Prerequisite:** "C" or better in Pre-Calculus *. **Annual Course**

Advanced Placement Calculus AB, #120231001: This course provides an extensive study of the general theory and techniques of calculus. The content includes the topics determined by the Advanced Placement Program. Graphing calculator is required. **Prerequisite:** "A" in Pre-Calculus or Honors Calculus *. **Annual Course**

Advanced Placement Calculus BC, #120232001: The purpose of this course is to provide an extensive study of the general theory and techniques of calculus. Graphing calculator is required. **Prerequisite:** AP Calculus AB. **Annual Course.**

Advanced Placement Statistics, #121032001: This course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Observing patterns and departures from patterns
2. Planning a Study: Deciding what and how to measure
3. Anticipating Patterns in Advance: Producing models using probability and simulation
4. Statistical Inference: Confirming models

Note: Students who successfully complete this annual course and examination may receive credit and/or advanced placement for a one-semester introductory college statistics course. Graphing calculator is required. **Prerequisite:** Algebra II Honors, "B" or better in Pre-Calculus, "A" in Advanced Topics in Math or "A", "B", or "C" in Calculus *. **Annual Course**

Discrete Mathematics, #122091A01: This course is designed to provide students with further study in topics of mathematics necessary for success in the advanced study of mathematics and computer science. The content includes, but is not limited to, set theory, functions and relations, symbolic logic, combinatorics, recursion, basic algebraic structures, and graph theory. This course stresses connections between contemporary mathematics and modern society. All topics have real-life applications. Students work online to solve applets and research applications.

Prerequisite: Teacher recommendation and Algebra II Honors or Advanced Topics in Math. **Annual Course**

*** See Flow Chart in the FORMS SECTION**

SCIENCE

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, scientific measurement, laboratory safety and use of apparatus, cell biology, cell reproduction, basic principles of genetics, biological changes through time, classification and taxonomy, microbiology, structure and function of the human body, 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 or Earth and Space Science *. **Annual Course**

Biology I Honors, #200032001: The purpose of this course is to provide students with advanced exploratory 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 Physical Science or Earth and Space Science *. **Annual Course**

Advanced Placement Biology I, #200034001: 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:** Preference is "B" or better in Honors Chemistry *. A study guide and AP Biology review book is required. Students must purchase a study guide and review book and complete a summer assignment. **Annual Course**

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, classification and structure of matter, atomic theory, periodic table, the mole concept, and chemical bonding, chemical formulas, chemical reactions and balanced equations, behavior of gases, physical changes, acids, bases and salts and energy associated with physical and chemical

changes. 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 calculator is required. **Prerequisite:** "A" or "B" in Algebra I, "C" or better in Biology (Regular or Honors) *. **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, heat, changes of matter, atomic structure, periodic table, bonding, formulas and equations, mole concept, gas laws, energy and order reaction rates and equilibrium, solutions: acids, bases, sales, nuclear chemistry, electrochemistry, and organic chemistry. 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. **Prerequisite:** Preference is "A" or "B" in Honors Biology, or "A" in Regular Biology*. **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. **Prerequisite:** "A" or "B" in Honors Biology and Honors Chemistry *. **Annual Course**

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 should include, but not be limited to, kinematics, dynamics, energy, work and power, heat and thermodynamics, wave characteristics, light, electricity, magnetism, and nuclear physics and sound. 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:** Concurrent enrollment in Algebra II or higher and recommended "C" or higher in Chemistry *. **Annual Course**

Physics I Honors, #200339001: The purpose of this course is to provide students with a rigorous introductory study of the theories and laws governing the interaction of matter, energy, and the forces of nature. The content should include, but not be limited to, kinematics, dynamics, energy, work and power, heat and thermodynamics, wave characteristics, light, electricity, magnetism, nuclear physics, and sound. Laboratory investigations of selected topics in the content that also include the use of the scientific methods, measurement, laboratory apparatus and safety are an integral part of the course. **Prerequisite:** "B" or better in Honors Chemistry or "A" in Regular Chemistry and Regular Biology, concurrent enrollment in Pre-Calculus or higher required *. **Annual Course**

Advanced Placement Physics B, #200342001: This course provides a systematic introduction to the main principles of classical and modern physics and emphasize a sophisticated development of problem solving technique. **Prerequisite:** "B" in Physics Honors or "A" in Regular Physics. Concurrent enrollment in Calculus or higher is required *. **Annual Course**

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 or Earth and Space Science and Algebra I *. **Annual Course**

Solar Energy and Alternatives II (Honors), #200255001: Solar II is in depth investigation, study, and application of Solar Energy and Alternatives Technologies. The focus of the course is two-fold: 1) To apply knowledge and concepts related to solar energy and other renewable alternatives technologies; 2) To discuss issues of relationship between energy consumption and its effects on the environment. The experimental and research sections is based on students constructing models to apply energy conservation, passive and active water and space heating and cooling, water purification, solar cooking, solar thermal electricity, solar mobility, and alternative fuels and electric vehicles. Students will also compare other renewable energy resources and will be able to critically analyze and discuss the intimate relationships between energy, ecology, economy, and politics. The gain of knowledge will give the students the opportunity to become advocates for sustainable energy and sustainable development. This Solar Energy course will require mathematical skills of at least Algebra II and in depth knowledge of the scientific process. Investigation and research skills are essential. The course will require two term research papers and three major products/models that use alternative energy technologies. **Prerequisite:** Junior or Senior Status, at least a "B" in Exploration of Solar Energy and Alternatives I and teacher recommendation *. **2nd Semester 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, conversation, 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. **Prerequisite:** "C" or better in Regular Biology *. **Annual Course**

Marine Science I Honors, #200251001: The purpose of this course is to provide the student with a survey of the marine biome. The content should include, but not be limited to, the origin of the oceans, the nature of the marine habitat including chemical, physical and geological aspects, ecology of the sea zonation, marine communities, classification, taxonomy, characteristics of major marine phyla/divisions, a man's interrelationship with the oceans. Laboratory investigations of selected topics in the content that also include the use of scientific

method, measurement, laboratory apparatus a safety are an integral part of the course. **Prerequisite or Co-requisite:** "B" or better in Biology and recommended completion of Chemistry *. **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 be 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 included Regular Environmental Science and Biology *. **Annual Course**

Intel Research I, #050030011: This course will provide students with the basic research skills to prepare them for competitive participation in the national Intel Research Science Talent Search as well as future research endeavors. The purpose of this course is to develop skills in basic research techniques. This will include identifying research problems and topics, developing basic research skills and data collection techniques, and developing hypotheses relating to a particular research problem. This course will also teach students how to apply skills toward the development of a scientific paper, project, product, and an oral defense. In addition, students will investigate contemporary issues in science and conduct a forum. At the completion of this course, students will have successfully undertaking a basic research project on their own. These advanced scientific tools will enhance problem-solving skills for all students, and give those competing in the Intel Research Science Talent Search a strong competitive advantage. **Prerequisite:** Permission of Department Chair or instructor. **Annual Course**

Intel Research II, #050031011: The purpose of this course is to expand upon previously acquired skills in data collection and basic research techniques learned in Intel Research I. The course is designed for students involved in a research project they plan to submit to the Intel competition. The course will refine the students' applications of research skills toward the development of scientific papers, proposals, and an oral presentation form at one local scientific competition (not including science fair). These advanced scientific and literary skills will be valuable tools toward any career path the students may pursue. **Prerequisite:** Intel Research I. **Annual Course**

DUAL ENROLLMENT COURSES

Dual enrollment courses and curriculum are subject to change due to appropriate enrollment and instructor availability. Students registering for dual enrollment classes are required to have a minimum 3.0 unweighted grade point average and be of Junior or Senior grade placement**.**

Introduction to Oceanography, #OCE200101: The oceans, their nature and extent. Water of the oceans, chemical balance. Marine province, sediments, and their relation to sea life and oceanic circulation, coastal provinces, sediments and their relation to sea life and oceanic circulation, coastal and deep-ocean circulation. Waves, tides, tsunamis. One fieldtrip is expected. **Prerequisite:** Biology (semester course); requirement for Dual Enrollment registration.

Meteorology, (Introduction to Weather), #MET101001: An introduction to the fundamentals of weather and their impact on human activities. Topics include temperature, humidity, clouds, precipitation, air masses, fronts, and storms. **Prerequisite:** requirements for dual enrollment registration.

Astronomy, #AST100201: The solar system, the nature of electromagnetic radiation, astronomical instruments, stars, galaxies, and cosmology. Sessions devoted to viewing the sky and to lab activities. **Prerequisite:** Requirement for dual enrollment registration.

Marine (Physical) Geology, #GLY 101001: The course includes, but is not limited to, the study of plate tectonics and geological processes as they influence the ocean floor and marine processes. The study of marine sediments, the role of various processes in producing the seafloor features, and the role of physical processes such as waves and currents in determining the characteristics of the ocean bottom will also be included.

Natural History of South Florida, #BSC 2250: Integrates and correlates certain features of the natural history of South Florida such as its geology, meteorology, flora, fauna, ecology, and conservation. **Semester course**

Social Issues in Biology, #BSC1030: Social Issues in Biology develops in students an understanding and appreciation for living systems (including themselves) and the skills and knowledge needed to address biological issues that are important and relative to their lives and the society in which they live. Such issues include, but are not limited to, the origin of biodiversity, advances in reproductive technology, genetic engineering, scientific ethics, advances in the treatment of disease and genetic disorders, environmental problems and sociobiology. **Semester course**

Introduction to Solar Energy EML1051C2 (.5 high school credit / 1 semester of a combined offering with Solar Energy II). This course teaches solar energy principals, technologies, and applications as source of heat and electricity (thermal and photovoltaics); energy analysis, projects/products design and construction, and lab investigation. Pre-requisite: Junior or Senior status, a minimum of a final grade of a "B" in Exploration of Solar Energy & Alternatives I, teacher recommendation and a 3.0 unweighted grade point average.

ON-LINE COURSES FOR HIGH SCHOOL CREDIT

Courses are completed via independent study with support from FLVS / MDVS on-line teachers. FLVS is a state sponsored entity, serving students from the most remote regions of Florida through all metropolitan areas.

All state-approved courses cannot be offered in every high school. In certain situations, scheduling conflicts arise which prohibit a student from taking a highly desired course. It is with the intent to make courses more readily available to our students that MAST Academy has joined into a working relationship with FLVS and the MDVS.

MAST Academy provides the following two (2) program options:

1. **Taking a FLVS/MDVS class during the "8th" period (after school).** Students must obtain approval from their parent, counselor, and an administrator. Remember that students choosing this option do so while maintaining a full load of courses at MAST.
2. **Taking a FLVS/MDVS class during the school day.** If a **junior** or **senior** has an unweighted 3.0 GPA, that student may opt to take an **approved** course (see list on following page) through FLVS / MDVS in lieu of one of the seven (7) classes taken at MAST Academy. Some classes may require a recommendation. Students selecting this option work in an assigned location and agree to remain there during the entire period. Violation of this agreement, even once, will constitute reason to be issued an on-campus class or disciplinary action.

Conditions to taking a course through FLVS/MDVS:

1. If a course is currently offered at MAST Academy, it cannot be taken on-line.
2. If the course is offered at MAST, but the student has a scheduling conflict that cannot be resolved, approval from a counselor and an administrator may be sought on a case-by-case basis.
3. Students will complete the course in a timeframe no longer than the semester or annual Miami-Dade County Public Schools calendar allocates.
4. The student works on no other work than his/her on-line material during the assigned period.
5. Any MAST student who requests permission to enroll and receive credit for an on-line course must meet all MAST on-line enrollment requirements. This includes registration for classes during the normal school year and summer session.

Students who are enrolled in courses through the FLVS on-line program will have the course listed as being taught by The Florida Virtual School. Only the attendance will be recorded on the progress reports. Academic grades will be issued by FLVS upon completion of all course work. This will occur at the end of the semester for semi-annual classes and at the end of the year for annual classes.

THE FLORIDA VIRTUAL SCHOOL (FLVS/MDVS) COURSE OFFERINGS AT MAST ACADEMY 2009-2010

The following courses are the only courses which will be approved to take at MAST Academy during normal school hours.

FOREIGN LANGUAGE

Course Title	Course Code #	Credit(s)
Latin I	070630001	1.0
Latin II	070631001	1.0
Latin III		1.0

COMPUTER EDUCATION

Course Title	Course Code #	Credit(s)
Web Design I (lab)	82071101	1.0
Web Design II (lab)	820712001	1.0
AP Computer Science	020032001	1.0

ART HISTORY

Course Title	Course Code #	Credit(s)
AP Art History (lab)	010030001	1.0

You may be interested in a FLVS / MDVS course offerings not listed. See your guidance counselor to discuss your enrollment for a class as an 8th period class.

ADDENDUM

Advanced Academics Internship, I-IV, #170030011-170033011: This course is no longer available at MAST Academy.

MAST Internship, #050030011: This course provides juniors and seniors with an opportunity to apply technical skills and competencies to real life career processes and settings. Course content includes resume writing, job interviewing, dressing for success, business manners, work ethics and other related topics. Students will work five or more hours per week in non-paying positions related to their major. Mentors will evaluate the student's job performance. Juniors can only receive one credit for this course (8^{th} period). Seniors can receive up to two credits, if placement is off-campus: 7^{th} or 8^{th} period (one credit), or 6^{th} and 7^{th} or 7^{th} and 8^{th} period (two credits). On-campus placements may be for any one period. ATHELETES ARE ENCOURAGED TO TAKE THIS COURSE DURING THE SUMMER. **Prerequisite:** Junior/Senior, student-provided transportation. **Annual Course**

Intensive Reading, # 100041001: 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 student's 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.

IF YOU ARE INTERESTED IN DUAL ENROLLMENT . . .

WHAT YOU NEED TO KNOW:

- You must have a 3.0 unweighted grade point average.
- You must be at least in the 10th grade.
- You must have *prior* approval from your parent/guardian, your counselor, **and** your principal. Without it, the school is under no obligation to accept credit.
- The grade you receive will be posted on your high school transcript, regardless of whether or not you are pleased with the grade you received.
- You must meet all college or university admission requirements, including passing a placement test, if necessary.
- You may enroll for a maximum of two courses per semester and a maximum of twelve credits per year.
- The Dual Enrollment course *must* meet a high school requirement and must be in conjunction with your overall post-secondary plan.
- The course fee is waived by the college/university, and the instructional materials (textbooks only) are paid for by the District.
- You are responsible for transportation to and from the college/university.

WHAT YOU NEED TO DO:

- Consult with your high school guidance counselor to determine eligibility.
- If you are eligible, request a *Dual Enrollment Authorization Request Form* from your counselor, fill out the top portion, sign it, and date it.
- Take the form home to your parents/guardians and have them sign and date it indicating their support and approval.
- Obtain a registration catalogue from the college/university in which you wish to enroll so that you may begin meeting all of the admission requirements. If a placement test is required, you must make arrangements to take the test and pass it before you may enroll.
- Obtain a course catalogue from the college/university in which you wish to enroll and meet with your high school guidance counselor. Choose courses based upon your high school credit needs and your post-secondary aspirations.
- Have your counselor complete the middle portion of the form, the bottom portion containing the course name and number, and sign and date the form.
- Your counselor will then request the approval and the appropriate signature from your principal.
- If approved, you should pick up the completed form from your counselor, leave the gold copy with him/her, and take the rest of it with you to the college/university in which you are enrolling.
- When you have completed the class, you are responsible for providing your school with a copy of the transcript in order to receive credit.

Course Majors Overview

MARINE STUDIES & CULTURE

FOREIGN LANGUAGE

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
French I	070132001	Discovering French [Blanc]		Yes	TBA	None	None		
French II	070133001	Discovering French [Bleu]		Yes	TBA	Completion of French I	None		
French III	070134001	Discovering French, [Rouge]		Yes	TBA	Completion of French II with a "C" or teacher recommendation	None		
AP French	070138001	Une Fois Por Toutes, 2nd edition		Yes	TBA	Teacher approval and recommendation	None		
Spanish I	070834001	En Espanol + Wrkbk		Yes	TBA	None	None		
Spanish II	070835001	En Espanol + Wrkbk		Yes	TBA	Completion of Spanish I	None		
Spanish III Honors	070836001/ 070852001	1. Dime III 2. Nuevos Mundos		Yes	TBA	Completion of Spanish II or Spanish S I	None		
Spanish S-I	070930001	Tu Mundo		Yes	TBA	Spanish Speaker Issue and Level Test	None		
Spanish S-II/AP	070931001/ 070840001	Pensamiento y Communicacion		Yes	TBA	Continuation of Spanish S-I	None		

LANGUAGE ARTS

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks novels)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
English I, Honors	100132001	Language of Literature		Yes	Yes	Summer Reading	None	Index Cards	
English II, Honors	100135001	Language of Literature		Yes	Yes	Summer Reading & Teacher Recommendation	None	Index Cards, Markers, Journal	
English III, Honors	100138001	Language of Literature	$12	Yes		Summer Reading & Teacher Recommendation	None	Notebook, 5 x 8 notecards (50)	
AP English, Language & Composition	100142001	Language of Literature		Yes		Summer Reading & Teacher Recommendation	None	Notebook, 5 x 8 notecards (50)	
English IV, Honors	100141001	TBA	$12	Yes		Summer Reading & Teacher Recommendation	None	Notebook, 5 x 8 notecards (50)	
AP English IV, Literature	100143001	TBA		TBA		Summer Reading & Teacher Recommendation	None	Notebook	
Field & Environmental Writing I & II	100932001 100933001	None		None	Walking Trips CSPA (New York)	None	None	Clip Board; journal	

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks /novels))	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Journalism I/Newspaper or Yearbook	100630001	TBA		None	CSPA (New York)	Teacher Recommendation	None	N/A	
Journalism II/Newspaper or Yearbook	100631001	TBA		None	CSPA (New York)	Teacher Recommendation, Journalism I	None	N/A	
Journalism III/Newspaper or Yearbook	100632001	TBA		None	TBA	Teacher Recommendation, Journalism II	None	N/A	
Journalism IV/Newspaper or Yearbook	100633001	TBA		None	TBA	Teacher Recommendation, Journalism III	None	N/A	
Technology in the Classroom	050092001	N/A		Yes	TBA	None	None	4 x 6 index cards, 3-ring binder	
Film I	010741001	Online sites		None	TBA	None	None	Notebook, CD's, DVD's to save work	

FINE ARTS

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Computer Art I	010337001		$30	None	N/A	None	None	Photography Paper	
Computer Art II	010335001		$30	None	N/A	Computer Art I	None	Photography Paper	
Art 2D/Art 3D	010130001 010133001		$30	None	N/A	None	None	Photography Paper	
Ceramics I	010230001		$25	None	Yes	None	TBA	None	
Ceramics II	010231001		$25	None	Yes	None	TBA	None	
AP Art History	010030001	Virtual School Acess		TBA	N/A	Completion of World History / 3.0 GPA	None	USB Flashdrive	

PERFORMING ARTS

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Steel Drum Band (Instrumental Techniques I & II)	130243001/130 242001	TBA	$10	TBA	Performance opportunities	Desire to play steel drum; audition for instructor	Attire for performance	None	
Steel Drum Band (Instrumental Techniques III)	130244001	TBA	$10	TBA	Performance opportunities	Instructor Permission	Attire for performance	None	
Steel Drum Band (Instrumental Techniques IV)	130245001	TBA	$10	TBA	Performance opportunities	Instructor Permission	Attire for performance	None	
Steel Drum Band (Instrumental Techniques IV)	130245001	TBA	$10	TBA	Performance opportunities	Instructor Permission	Attire for performance	None	

SOCIAL STUDIES

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
World History, Honors	210932001	The Human Journey/Holt		None	TBA	None	None	Standard Materials	
American History, Honors	210032001	The American Odessy/Glencoe		Freedom Road/Red Badge of Courage	TBA	"A" or "B" in World History & teacher recommendation	None	Standard Materials	
AP U.S. History	210033001	America: Past & Present/Prentice Hall		Summer Reading TBA	TBA	English & Social Studies teacher recommendations	None	Standard Materials	
AP Government	210642001	American Government Institutions & Policies/McDougal		TBA	TBA	Teacher Recommendation	None	Standard Materials	
Honors Economics	210232001	Economics Principles & Practices (Glencoe)		None	TBA	World History	None	Standard Materials	
AP Economics	210237001/ 210236001	Economics/Glencoe		TBA	TBA	Teacher Recommendation	None	Standard Materials	
Honors American Government	210632001	American Government & Politics Today/Thompson		None	TBA	"A" or "B" in AP/Honors American History, teacher recommendation	None	Standard Materials	

OCEANIC & ATMOSPHERIC SCIENCE TECHNOLOGY

MATHEMATICS

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Geometry	120631001	Glencoe Mathematics: Geometry		**N/A**	TBA	Complete Algebra I with a "C" or better	None	Straight edge compass, graph paper, calculator	
Geometry, Honors	120632001	McDougal Littell Geometry: Reasoning, Applying, Measuring		**N/A**	TBA	Pass Algebra I with a "B" or better	None	Straight edge compass, graph paper, calculator	
Algebra II	120033001	Glencoe Mathematics: Algebra II		**N/A**	TBA	"C" or better in Geometry/Algebra I	None	Graphing calculator, graph paper	
Algebra II, Honors	120034001	McDougal Litell, Algebra II		**N/A**	TBA	Pass Geometry with a "B" or better	None	Graphing calculator, graph paper	
Advanced Topics in Mathematics	129831001	Glencoe Advanced Mathematical Concepts		**N/A**	TBA	Pass Algebra II with a "C" or better at MAST or "B" if taken elsewhere	None	Graphing calculator, graph paper	
Pre-Calculus	120234002	Pre-Calculus with Limits		**N/A**	TBA	"C" or better in Adv. Topics in Math or "B" or better in Algebra II Honors or "A" in Algebra II Regular	None	Graphing calculator, graph paper	
Calculus, Honors	120230001	Calculus: Graphical, Numerical, Algebraic		**N/A**	TBA	"C" or better in Pre-Calculus	None	Graphing calculator, graph paper	
AP Calculus (AB)	120231001	Calculus		**N/A**	TBA	"A" in Pre-Calculus or Honors Calculus	None	Graphing calculator, graph paper	
AP Calculus (BC)	120232001	Calculus		**N/A**	TBA	AP Calculus AB	None	Graphing calculator, graph paper	
AP Statistics	121032001	The Practice of Statistics		**N/A**	TBA	"A" in Algebra II Honors or "B" or better in Pre-calculus	None	Graphing calculator, graph paper	
Discrete Mathematics	122091A01	Problem Solving Strategies: Crossing the River with Dogs and Other Mathematical Adventures; For all Practical Purposes: Mathematical Literacy in Today's World		**N/A**	TBA	"A" in Algebra II Honors or pass Advanced Topics in math	None	Graphic calculator, graph paper	

SCIENCE

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Biology I	200031001	Biology Prentiss-Hall	$10	Lab manual purchased by student	TBA	"C" or better in Physical Science or Earth/Space Science	None		
Biology I, Honors	200032001	TBA	$12	TBA	TBA	"B" or better in Physical Science or Earth/Space Science	None	Coloring Pencils	
AP Biology	200034001	Biology Campbell 7th Edition	$12	TBA		"B" or better in Honors Chemistry	None	Graphing Calculator	
Chemistry	200334001	Chemistry Matter & Change Glencoe	$10	TBA	TBA	"C" or better in Biology/Algebra I	Closed toed shoes	Scientific calculator, graph paper	
Chemistry Honors	200335001	Modern Chemistry	$12	TBA	TBA	"A" or "B" in Honors Biology or "A" in Regular Biology	Closed toed shoes	Scientific calculator, graph paper	
AP Chemistry	200337001	Chemistry Brown & Lemay	$12	TBA		"A" or "B" in Honors Biology and Honors Chemistry	Closed toed shoes	Scientific calculator, graph paper	
Physics I	200338001	TBA	$10	TBA	TBA	Concurrent enrollment in Algebra II and "C" or better in Chemistry	None		
Physics I Honors	200339001	TBA	$12	TBA	TBA	"B" or Better in Honors Chemistry or "A" in Regular Chemistry and Regular Biology / concurrent enrollment in Pre-calculus or higher	None	Graphing calculator, graphing paper, protractor, ruler, pencil	
AP Physics (B & C)	200342001	TBA	$12	TBA		"B" in Physics Honors or "A" in Regular Physics with concurrent enrollment in Calculus or higher	None	Calculator, graph paper, protractor, ruler, pencil	
Marine Science Honors I, II	200251001	Life on an Ocean Planet	$12	TBA	TBA	"B" or better in Biology and Chemistry is recommended	None		
Solar Energy Honors I	200254001	TBA	$12	TBA	TBA	"B" or better in Physical Science or Earth/Space Science, 3.0 gpa, teacher recommendation	None		
Solar Energy II Honors	200255001	TBA	$12	TBA	TBA	"B" or better in Solar I and teacher recommendation	None		
Environmental Science	200134003	Environment Holt	$10	TBA	TBA	"C" or better in Regular Biology	None		
AP Environmental Science	200138001	Living in the Environment Miller 14th Edition	$12	TBA	TBA	"B" or bettering Honors Chemistry, preference is to have included Regular Environmental Science and Biology	None		

MARITIME RELATED INDUSTRIES

AQUATIC SPORTS AND HEALTH OPERATIONS

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Personal Fitness	150130001	Personal Fitness and You	Lock (school cost)	TBA	TBA	Swim Test	Swim Suit (one piece) & Cap	Athletic Shoes, Towel	
Health & Life Management Skills	080030001	Glencoe: A guide to Health			TBA				
Beginning Swimming	150446001	TBA	Lock (school cost)		TBA		Swim Suit (one piece) & Cap	Towel	
Intermediate Swimming	150447001	Basic Water Rescue	If certified, charge TBA Lock (school cost)		Snorkel Fieldtrip TBA	Personal Fitness	White T-shirt, navy blue shorts, tennis shoes, socks, 1 piece navy blue swim suit for girls, 1 piece navy blue boxer swim suit for boys, water shoes	Towel	Red Cross Swimming, Community First Aid, and CPR, AED certifications; Basic Water Rescue
Individual & Dual Sports I	150241001	Canoeing & Kayaking, Start Windsurfing Right	If certified, charge TBA. Lock (school cost)		TBA	Red Cross Swimming Level III	Same as above	Towel	
Water Safety	150449001	Lifeguarding Today	If certified, charge TBA. SCUBA TBA Lock (school cost)		Snorkel fieldtrip, TBA	Successful completion of Red Cross Swimming Level V	Same as above	Towel	Red Cross Lifeguard certificate, PADI Open Water Diver certificate
Individual & Dual Sports II	150242001	Start Sailing Right, PADI Open Water Dive Manual	If certified, charge TBA Lock (school cost)		Snorkel fieldtrip, TBA; Open Water SCUBA Dives	Same as above	Same as above	Towel	PADI Open Water Diver certificate
Beginning Weight Training	150134001	Weight	Lock (school cost)			Personal Fitness	PE Uniform & Weight Belt, Sneakers	Towel	
Intermediate Weight Training	150135001	Weight Training Steps to Success, Second Edition	Lock (school cost)			Personal Fitness	PE Uniform & Weight Belt, Sneakers	Towel	

ENGINEERING

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Engineering Technology I,	860057001	TBA	$15	TBA	TBA	Algebra I	Closed toed shoes	Engineering Notebook	None
Engineering II	860067002	TBA	$15	TBA	TBA	Engineering I	Closed toed shoes	1-2 GB USB Drive	None
Engineering III	860177001	TBA	$15	TBA	TBA	Engineering I, II	Closed toed shoes	1-2 GB USB Drive	None

HOSPITALITY AND FOOD PRODUCTION

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Culinary Operations I	851521001	Culinary Essentials/ProStart 1	$50		TBA	Entry Level	Chef Uniform (provided)	Notebook	
Culinary Operations II	851522001	On Cooking/Prostart II	$50		TBA	Culinary Operations I	Chef Uniform (provided)	Notebook	
Culinary Operations III	851523001	On Cooking/ProstartII	$50		TBA	Culinary Operations II	Chef Uniform (provided)	Garnishing kit, notebook	
Careers in the Hospitality Industry-DE	HFT100101	TBA			TBA	- Dual Enrollment status - Culinary Operations I/Junior/Senior	Business attire on fieldtrips	Notebook	College Credit
Introduction to Culinary Arts—DE	FSS100501	Professional Cooking & Baking	$25		Yes	- Dual Enrollment status - Culinary Operations I/Junior/Senior	Chef apron & hat (Charge TBA)	Notebook	College Credit
Blueprint for Success	850037501	Hospitality Today	$25						

UNITED STATES COAST GUARD JROTC

TITLE	COURSE NUMBER	TE1-2 GB USB Drive XTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Maritime Science I	180432001	Coast Guardsman's Manual			**USCG Base, Air Station, District Office**	None	USCG uniform (provided) *shirt, hat (may require purchase)		
Maritime Science II	180433001	USCG Auxiliary Boating Skills			**FIU Ropes**	Maritime Science I	Same as above *shirt, hat (may require purchase)		USCG Auxiliary Boating Skills
Maritime Science III	180434001	USCG Auxiliary Advanced Coastal Piloting			**Marine Navigation Charter**	Maritime Science II	Same as above *shirt, hat (may require purchase)		USCG Auxiliary Advanced Coastal Navigation
Maritime Science IV	180435001	Organizational Management Behavior			**USCG Command/Boats**	Maritime Science III	Same as above *shirt, hat (may require purchase)		USCG Leadership and Management School

TECHNOLOGY EDUCATION

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Basic Principles of Materials & Processes Technology I	860111013	Modern Cabinet Making	Material Ticket		**TBA**	None	None		
Basic Principles of Materials & Processes Tech II	860112023	Modern Cabinet Making	Material Ticket		**TBA**	None	None		
Basic Principles & Processes III	860113033	Modern Cabinet Making	Material Ticket		**TBA**	None	None		

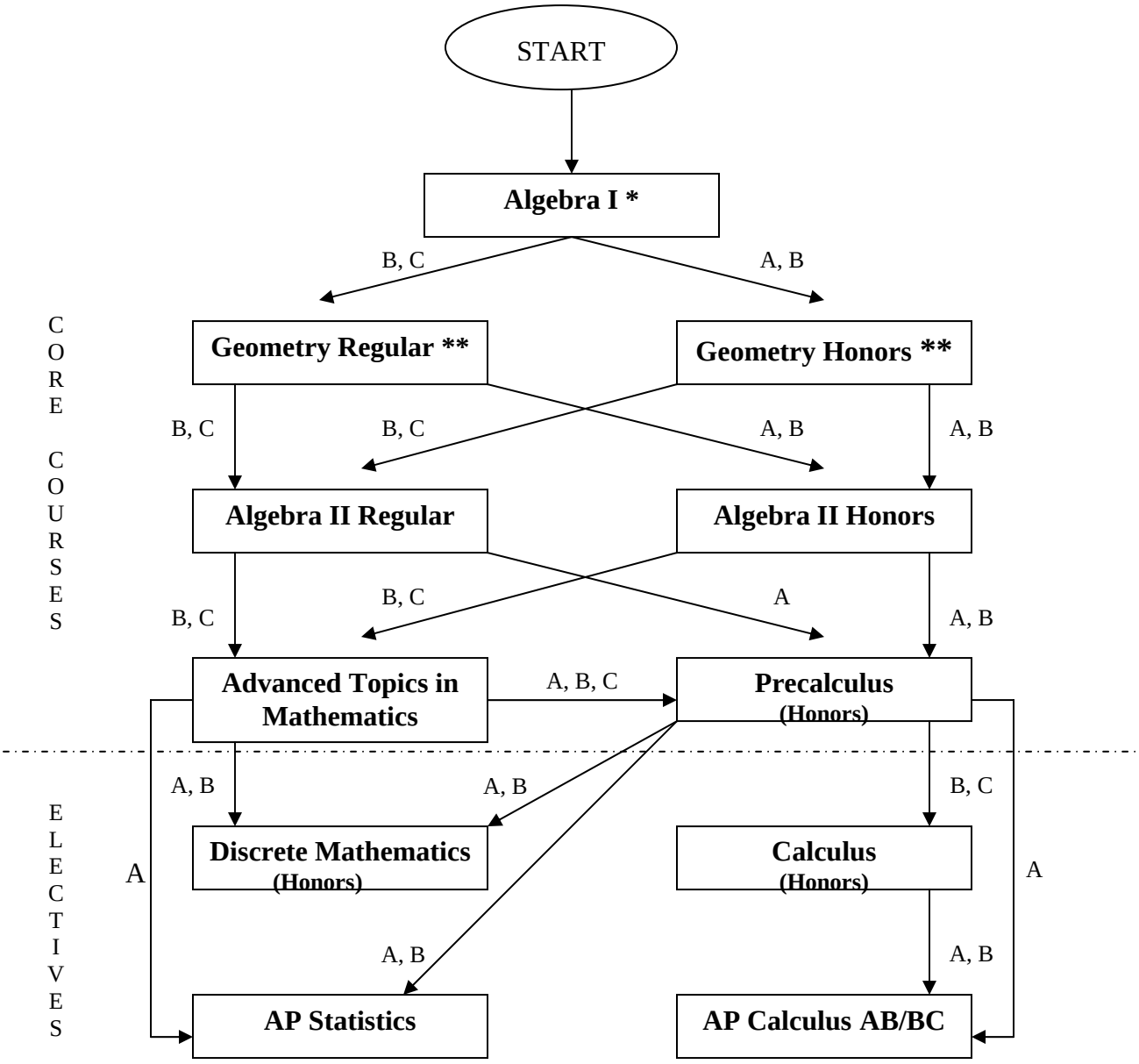
COMPUTER EDUCATION

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Introduction to Information Technology	820731001								
Web Design I	820711001	None				Computer Literacy			
Web Design II	820712001	None				Web Design 1			
AP Computer Science	020032001	Assigned Text				Algebra II			

INTERNSHIP & LEADERSHIP

TITLE	COURSE NUMBER	TEXTBOOK	FEES	OTHER BOOKS (workbooks @ cost)	FIELDTRIPS	PREREQUISITES OR SKILLS	SPECIAL ATTIRE	STUDENT PROVIDED SUPPLIES	ANTICIPATED CERTIFICATION
Intel / Research	170031011	None			**N/A**	Teacher Approval & Recommendation		Own transportation & medical insurance	None
Executive MAST Internship	050030011	None			**N/A**	Junior, Senior; approval of Internship Coordinator	Depending on placement	Own transportation & medical insurance	None

MAST Academy
Mathematics Courses Flow Chart



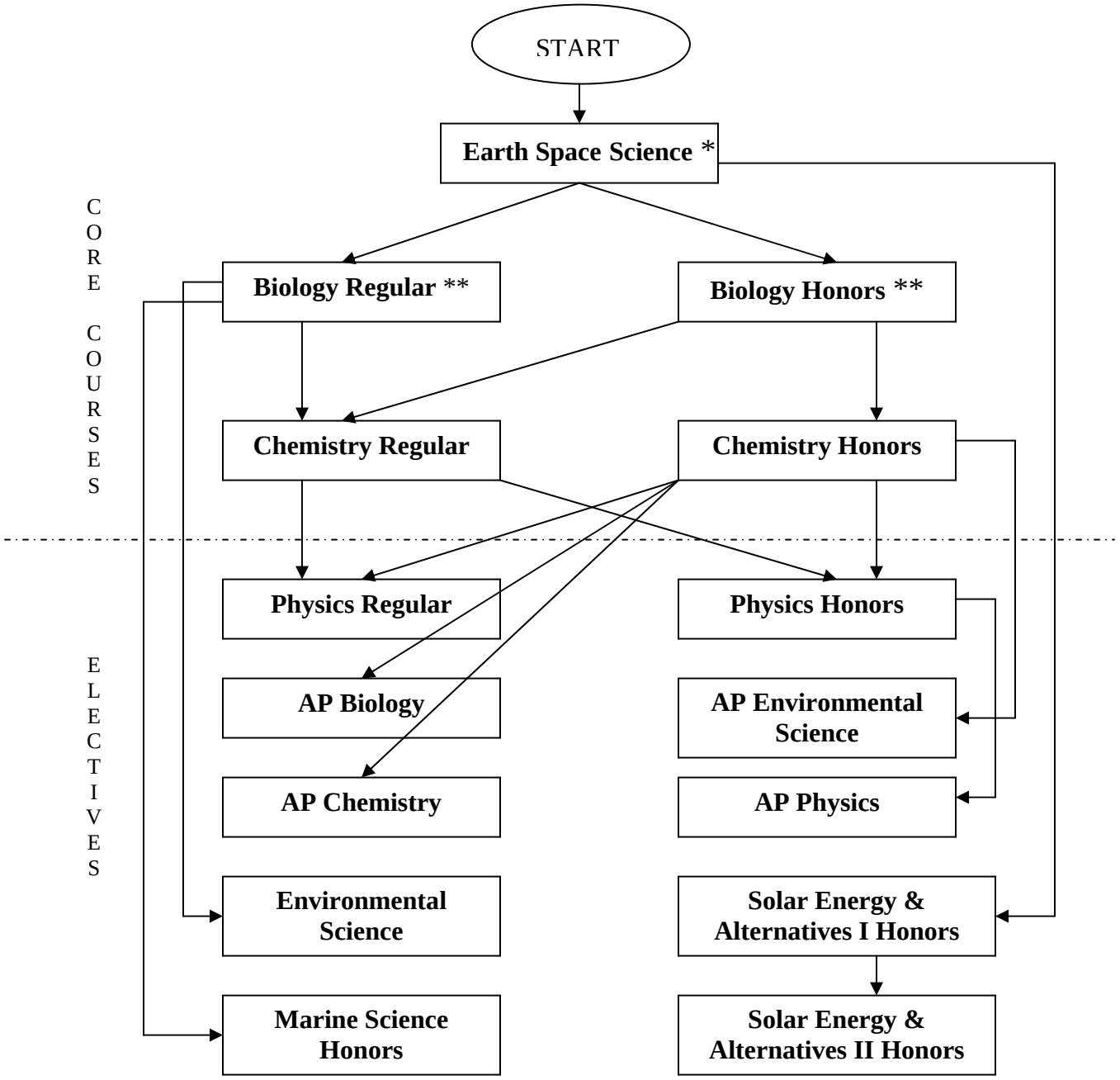
*** Required of incoming 9th grade students**

**** Required of incoming 10th grade students**

MAST students earning a "D" in any mathematics course are encouraged to retake the course. Students earning an "F" in any mathematics course must retake the course.

Mathematics electives must be taken after or with core mathematics courses, not in lieu of core mathematics courses.

MAST Academy
Science Courses Flow Chart



* **Required of incoming 9th grade students**

** **Required of incoming 10th grade students**

Forms

2009 - 2010

MAST Academy
Advanced Placement Student Expectations Agreement

Date: _____

Student Name: _____

Advanced Placement Course: _____

****

Taking an Advanced Placement course and exam is a collaborative effort among the student, the student's parent/guardian, the teacher, and the school. Each party plays a role and must make the commitment to meet the expectations noted below.

AP Students agree to organize their time and effort to complete the Advanced Placement courses in which they are enrolled. Students will notify teachers immediately if they fall behind in class readings and/or assignments. Students are expected to complete assignments, readings and projects outside of class time. Students will take the Advanced Placement exam on its scheduled date and time as outlined by the College Board. Students agree to comply with all College Board policies and procedures.

Parents/Guardians agree to be familiar with and accept the Advanced Placement course requirements and policies, and to help their children organize study time in support of class assignments. Parents agree to purchase required materials. The parent agrees the student will take the Advanced Placement exam on its scheduled date and time as outlined by the College Board.

The School/Advanced Placement Teacher agrees to provide rigorous instruction and challenging course content as described in the *Advanced Placement Course Description*. The school will provide the student with a copy of the *Bulletin for Advanced Placement Students and Parents* and agrees to administer the Advanced Placement exam in a fair and secure environment as outlined in the *Advanced Placement Coordinator's Manual*.

****

Students without teacher recommendations for an Advanced Placement course may enroll by parent override. Advanced Placement courses carry bonus points toward calculation of a student's weighted grade point average (GPA).

Advanced Placement exams are an integral part of the Advanced Placement curriculum. When students are enrolled in an Advanced Placement course an Advanced Placement exam is ordered for them. The State of Florida pays for the exam; however, the student/parent incurs financial penalties if the exam is ordered and not taken.

Reasons why taking and passing the Advanced Placement Exam is important:

- The curriculum is rigorous and challenging
- The exam is free if you are enrolled in the course
- Advanced Placement exams provide an opportunity for the student to see how well he/she is able to do on one of the most carefully developed examinations he/she will ever encounter
- Advanced Placement scores make a more competitive college applicant
- A score of three or above can earn college credit and thereby reduce college costs
- A student may be able to enroll in courses in other disciplines without adding to his/her course load while at college
- Entry to a college honors program may be available
- Students may be able to cut back on courses during a college semester of heavy reading or lab work
- Students may have an opportunity to undertake a double major
- Students may take graduate courses as an undergraduate
- Students may be able to change a major without staying in college longer

****

We understand the importance of taking the Advanced Placement exams for courses in which the student is enrolled at MAST Academy. We know as well that because Advanced Placement courses are more challenging than other high school courses, the student will be required to devote more time to Advanced Placement requirements. Our signatures below indicate our understanding of both the benefits and demands of an Advanced Placement course.

_____	_____	_____
Student Name – print	Student Signature	Date
_____	_____	_____
Parent/Guardian Name – print	Parent/Guardian Signature	Date

MAST Academy
Course Override Request – Parent Agreement

A course override allows a student to take a course in which both the student and parent feel the student will be successful. A significant effort by faculty has been made to recommend the student to the level at which they will best perform. Students who request an override have not received teacher/administrative recommendation and/or met prerequisites. Overrides are not permitted for Dual Enrollment or online classes.

Process: The student must: 1) complete section "A" of this form; 2) a parent/guardian must speak with appropriate teacher or department chairperson; 3) parent/guardian, teacher, and student must complete section "B"; 4) parent/guardian or student must return this form to the appropriate counselor.

Section A: Student

Name	ID#	Date

Knowing your performance in the prerequisite course has not warranted teacher recommendation, briefly state specific reasons why you feel you will perform adequately in the course(s) for which you are requesting an override.

_____

_____

_____

Section B. Parent/Guardian

Prerequisites for courses have been established by each department and approved by the MAST Academy Curriculum Council. They should be taken seriously. A major factor for success in school is appropriate course placement. If your child has not been approved to take a course, there is reason to doubt successful completion of this course.

I am aware that my child has not received teacher/administrative recommendation for the desired course(s). I am aware that if my child has difficulty in the requested course(s), it is his/her responsibility to do what is necessary to perform satisfactorily. He/she will not be removed from the course. I understand that my child will be well served by discussing this recommendation with my child's teacher or department chairperson. The teacher signature on this form indicates that a parental/teacher discussion has occurred regarding this override and does not necessarily mean teacher approval of the override. Overrides will not be accepted without a teacher signature acknowledging that this discussion has occurred.

Parent Name (please print)	Home Phone #	Work Phone #

Parent Signature	Student Signature

Date	Date

<u>DO NOT REMOVE THIS FORM</u>. SEE YOUR GUIDANCE COUNSELOR FOR AN OVERRIDE REQUEST. REQUEST WILL BE GRANTED BASED ON AVAILABILITY.

MAST Academy

New Student Course Override Request—Parent Agreement

A course override allows a student to take a course in which both the student and parent feels the student will be successful. We urge all students and parents to read the "Appropriate Course Selection" document and to choose their courses carefully.

Process: The student must complete section "A" of this form. A parent/guardian and student must complete section "B." Student must return this form at the time of registration.

Section A: Student

Name	ID#	Date

Requested Courses(s)

Briefly state specific reasons why you feel you will perform adequately in the course(s) you are requesting an override for:

_____

_____

_____

Section B: Parent/Guardian

A major factor for success in school is appropriate course placement.

I am aware that if my child has difficulty in the requested course(s), he/she must do what is necessary to perform satisfactorily. Tutoring is available for all students.

Parent Name (please print)	Home Phone #	Work Phone #

Parent Signature	Date

<u>DO NOT REMOVE THIS FORM</u>. SEE YOUR ADMISSIONS PACKET FOR AN OVERRIDE REQUEST. REQUEST WILL BE GRANTED BASED ON AVAILABILITY.

MAST Academy

USCG Junior Reserve Officer Training Corps Program Application

This form MUST be completed and submitted in order to register for this class.

Student Name	Grade	ID #

USCG JROTC Mission

The mission of the United State Coast Guard Junior Reserve Officers' Training Corps is to produce young men and women with a high sense of honor and integrity as well as sound bodies, determination, inquisitive minds, knowledge, motivation, self-discipline, and organizational skills necessary to fulfill the role of the leaders of tomorrow. These skills are developed through training practical experience, teamwork, and leadership, achieved through the careful supervision of faculty, military advisors, and cadets.

The USCG JROTC is a service organization. The cadets are expected to participate in school and community projects on a regular basis. Ideally, the cadets set up and run the projects using practical leadership skills taught by the Maritime Science instructors. The cadets also gain practical maritime skills, that when combined with the leadership skills learned, help make them better prepared for life in general.

Parent Participation

Parents provide a vast wealth of resources that can benefit the Mako Battalion. To make this program the best it can be, parents are needed. Parents of cadets are expected to support the battalion through Booster Club activities. Membership in the Booster Club, though not required, helps maintain a level of readiness to support the battalion. Charging fees to replace this may be instituted if, at any time, the instructors feel it is necessary.

Throughout the year there are many activities that parents are needed to participate in. Without your support many aspects of the curriculum would not be possible. A few activities that parents are expected to be involved in are:

1. Fieldtrip chaperones
2. Bake sale donations and coordination
3. Phone committee member or chairperson
4. Active participation in Booster Club meetings
5. Aid in uniform preparation and maintenance

Parent Agreement

I, _____, authorize my child to participate in the USCG JROTC at MAST Academy and agree to support the USCG JROTC Mako Battalion by participating in at least one Booster Club activity and will try my best to actively participate in other events sponsored by the Mako Battalion.

Parent Name (please print)	Parent Signature	Date

MAST Academy

Student Subject Selection Worksheet

2009 – 2010 ~ Grades 10th through 12th

Name:_____ **ID#:**_____

HP: _____ **Home Phone:**_____

Major:_____

Required or Desired Course	**Level** (Regular, Honors, or AP)
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____

NOTE: Due to the possibility that certain courses may close, several optional classes must be selected to allow students to meet graduation and major requirements. It is imperative that students provide alternate courses to meet these requirements.

ALTERNATE COURSES: Please list in order of preference. You must list a minimum of three alternate courses. If you do not provide alternate courses, your counselor will make the choices for you.

1. _____

2. _____

3. _____

Statement of Understanding

I understand that the following are minimum qualifications in order for my child to remain enrolled at MAST Academy:

- Maintain an unweighted GPA of 2.5
- Appropriate attendance in all classes (including tardies)
- Abide by the regulations set forth in the Code of Student Conduct – Violations of Level 3 or higher will result in return to student's home school.

Consequences for not maintaining the above requirements may include but are not limited to exclusion from extra-curricular activities, field trips, school events, and/or withdrawal from MAST Academy.

I also understand that voluntary withdrawal of my child from MAST Academy is permanent and that my child may not be subsequently re-enrolled without following regular admissions procedures.

_____

Student's Signature Date Parent's Signature

ENTERING 9TH GRADE COURSE SELECTION
2009-2010

Name:_____ **Student ID#:**_____

CORE COURSES

DIRECTIONS: In each category, select ONLY one course, either regular or honors. Students who request honors level courses must submit an override form with parent signature.

		REGULAR	HONORS
English I			☐
World History			☐
Math (choose one)			
	Geometry	☐	☐
	Algebra II	☐	☐
	Pre-Calculus		☐
Health/Personal Fitness	**(Mandatory 9th grade course)**	☐	
Science (choose one)			
	Biology	☐	☐
	Chemistry	☐	☐

ELECTIVE COURSES

DIRECTIONS: You must choose two electives with one alternate course. Check ONLY one box in each column to select your 1st, 2nd, and 3rd choice. Students will be scheduled based on the availability of elective courses.

	First Choice	Second Choice	Third Choice
EXAMPLE Solar Energy		x	
Spanish I, II, III (circle one)			x
JROTC Maritime Science I	x		
Culinary Operations I	☐	☐	☐
Engineering I	☐	☐	☐
JROTC Maritime Science I	☐	☐	☐
Steel Drum Band (Inst. Tech.)	☐	☐	☐
Solar Energy **	☐	☐	☐
Woodshop I (Material Processing)	☐	☐	☐
French (Specify Level I, II, III) (circle)	☐	☐	☐
Spanish (Specify Level I, II, III) (circle)	☐	☐	☐
Spanish S (Specify Level I, II) (circle)	☐	☐	☐

Statement of Understanding

I understand that the following are minimum qualifications in order for my child to remain enrolled at MAST Academy:

- Maintain an unweighted GPA of 2.5
- Appropriate attendance in all classes (including tardies)
- Abide by the regulations set forth in the Code of Student Conduct – Violations of Level 3 or higher will result in return to student's home school.

Consequences for not maintaining the above requirements may include but are not limited to exclusion from extra-curricular activities, field trips, school events, and/or withdrawal from MAST Academy.

I also understand that voluntary withdrawal of my child from MAST Academy is permanent and that my child may not be subsequently re-enrolled without following regular admissions procedures.

_____

Student's Signature Date Parent's Signature

MAST Academy
Intel Research I & II Course Criteria Form

Name: _____

Grade Level: _____ 10 _____ 11 _____ 12

GPA: (must be 3.5 or above) _____

Signature of Counselor: _____

Recommendation from Science or Language Arts teacher: (please rate on a scale of 1 to 5 — [1] Poor [2] Below Average [3] Average [4] Good [5] Excellent)

1. Is this student good at independent study? _____
2. Does this student take initiative? _____
3. Does this student work well on his/her own? _____
4. Does this student show a strong interest in Science? _____
5. Does this student show a strong interest in Language Arts? _____
6. Would this student be prepared to conduct research? _____

Signature of Science/Language Arts Teacher	**Signature of Department Chairperson**
Date	**Date**

Student Research Interest (student to complete): Briefly describe ideas for a research project you would like to pursue in the Intel Research I Course. If applying for Intel Research II, describe in detail the research project you are currently working on. Attach any results or date from your current research. Use a separate sheet of paper if necessary.

Student Signature	**Parent Signature**
Date	**Date**

The School Board of Miami-Dade County, Florida, adheres to a policy of nondiscrimination in employment and educational programs/activities and programs/activities receiving Federal financial assistance from the Department of Education, and strives affirmatively to provide equal opportunity for all as required by:

Title VI of the Civil Rights Act of 1964 – prohibits discrimination on the basis of race, color, religion, or national origin.

Title VII of the Civil Rights Act of 1964, as amended – prohibits discrimination in employment on the basis of race, color, religion, gender, or national origin.

Title IX of the Education Amendments of 1972 – prohibits discrimination on the basis of gender.

Age Discrimination in Employment Act of 1967 (ADEA), as amended - prohibits discrimination on the basis of age with respect to individuals who are at least 40.

The Equal Pay Act of 1963, as amended – prohibits sex discrimination in payment of wages to women and men performing substantially equal work in the same establishment.

Section 504 of the Rehabilitation Act of 1973 – prohibits discrimination against the disabled.

Americans with Disabilities Act of 1990 (ADA) – prohibits discrimination against individuals with disabilities in employment, public service, public accommodations and telecommunications.

The Family and Medical Leave Act of 1993 (FMLA) – requires covered employers to provide up to 12 weeks of unpaid, job-protected leave to "eligible" employees for certain family and medical reasons.

The Pregnancy Discrimination Act of 1978 – prohibits discrimination in employment on the basis of pregnancy, childbirth, or related medical conditions.

Florida Educational Equity Act (FEEA) – prohibits discrimination on the basis of race, gender, national origin, marital status, or handicap against a student or employee.

Florida Civil Rights Act of 1992 – secures for all individuals within the state freedom from discrimination because of race, color, religion, sex, national origin, age, handicap, or marital status.

School Board Rules 6Gx13-4A-1.01, 6Gx13-4A-1.32, and 6Gx13-5D-1.10 – prohibit harassment and/or discrimination against a student or employee on the basis of gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual orientation, social and family background, linguistic preference, pregnancy, or disability.

Veterans are provided re-employment rights in accordance with P.L. 93-508 (Federal Law) and Section 295.07 (Florida Statutes), which stipulate categorical preferences for employment.

Revised 5/9/03