# **Academy of Marine Science**

### Career Cluster: Science, Technology, Engineering & Mathematics

## Program Strand: Marine Science

Students who choose a career in the Marine Sciences can direct school, college, professional and organizational programs as well as allied fields of study. These opportunities include the technological applications to those fields of study and hands on programs

Secondary Career Academy Development Timetable Academy classes are listed in bold type.

Pre-Academy Grades 6 – 8	Grade 9	Grade 10	Grade 11	Grade 12
6 <sup>th</sup> grade—Middle Moves 7 <sup>th</sup> grade—Career Preparation Requirement 8 <sup>th</sup> grade—Transition Tools	English I	English II	English III	English IV
	Algebra or higher	Geometry or higher	Algebra II or higher	Pre-calculus or Other Mathematics Course
	Earth & Space Science or Biology	Biology or Chemistry	Chemistry or Physics	Environmental Science or Other Science Elective
	World History	Marine Science I	American History	American Government / Economics
	9 <sup>th</sup> Grade Transition	Foreign Language	Foreign Language	Physics or Other Science Elective
	Zoology 200041001	Marine Science 1 200250001	AP Biology 200034001	Marine Science II 2002523001
	Elective	Elective	Elective	Elective
	Elective	Elective	Elective	Elective

#### Suggested Electives:

- Science electives are expected to be AP level courses. Highly recommended courses are AP Biology and AP Chemistry. Limnology may be substituted for an AP Science course.
- Students may in their Junior or Senior year opt to participate in the Career Experience Opportunity (CEO) internship program using the following course numbers: Workplace Essentials 83003101A (Honors .5) and CEO internship 0500330CE (Honors .5).
- Students may complete more than one program within the Academy of Marine Science providing courses are offered at the school site.
- In addition, students can choose to enroll in Science classes to enhance their marketability.

To find a Miami-Dade County Public High School with this Program Strand, please link to http://ssr.dadeschools.net/acad\_tally\_schls.pdf.

Internship Opportunities	Student Organizations / Clubs	Earn Upon Completion
Internships Cooperative Education Job Shadowing Service Learning Dual Enrollment Talented 20 FACTS.org Portal to CEO Florida Choices Planner	Marine Science Club	<ul> <li>Industry Title &amp; FLDOE OCP's correlated to the individual areas.</li> <li>For more information on the Florida Department of Education Bright Futures Scholarship Programs: Florida Academic Scholars Award (FAS), Florida Medallion Scholars Award (FMS), and Florida Gold Seal Vocational Scholars Award (GSV) please contact a guidance counselor or visit: <a href="http://www.floridastudentfinancialaid.org/ssfad/factsheets/BF.htm">http://www.floridastudentfinancialaid.org/ssfad/factsheets/BF.htm</a>.</li> <li>For more information about TECH PREP Articulation Agreements with local colleges, please contact your guidance counselor.</li> </ul>

#### POSTSECONDARY OPTIONS

Certification Programs	Community College (A.A./A.S.) or Proprietary Programs	Four-Year College and	University Programs
<ul> <li>NOAA</li> <li>National Estuary Program</li> <li>Fish and Wildlife Research Institute</li> <li>US Geological Survey</li> <li>Florida Institute of Oceanography</li> </ul>	Florida Keys Community     College     Broward Community College     Daytona Beach College	<ul> <li>University of South Florida</li> <li>University of Miami</li> <li>Florida International University</li> </ul>	Florida Institute of     Technology     Florida Atlantic University     Nova South Eastern     University

#### CAREER OPTIONS

Entry Level		After Post-Secondary Education	
Mariculture     Aquarium Setup & Maintenance     Water Quality Assessment	<ul><li> Marine Research</li><li> Pollution Investigation</li><li> Ecotourism</li><li> Environmental Mitigation</li></ul>	<ul> <li>Marine Chemistry</li> <li>Marine Biology</li> <li>Marine Geology</li> <li>Oceanographer</li> </ul>	<ul> <li>Marine Physics/Ocean</li></ul>