



	<p><u>ADVANCED MARIEN SCIENCE AB</u></p> <p>(Annual Course Grades 10-12)</p> <p>Prerequisite: Biology AB or equivalent, Physical Oceanography</p>
Course Code Number and Abbreviation	<p>36-06-11 <u>Adv Marine Sci A</u></p> <p>36-06-12 <u>Adv Marine Sci B</u></p>
Course Description	<p>The major purpose of this course is to expand the student's knowledge of the ocean. The coursework builds upon concepts from Biology and Physical Oceanography to provide advanced academic studies. Additionally, the students are expected to distinguish between the facts and opinions about the oceans and cite evidence to support appropriate conclusions. An increased emphasis is placed on human beings' exploitation of the oceans and the global impact of that exploitation. Students are expected to discuss possible solutions for abuses of global ecology and relate economic and sociological issues with scientific concerns. Advanced Marine Science AB meets one year of the University of California "f" requirements for an elective science class.</p>

<p>California Language Arts Content Standards</p>	<p>The following standard from <i>English-Language Arts Content Standards for California Public Schools</i> will be measured on State assessments:</p> <ul style="list-style-type: none"> • Use clear research questions and suitable research methods (e.g., library, electronic media, personal interview) to elicit and present evidence from primary and secondary sources.
<p>Representative Performance Objectives</p>	<p><i>In accordance with their individual capacity, students will grow in the ability to:</i></p> <ul style="list-style-type: none"> • Demonstrate process skills of scientific thinking: observing, communicating, comparing, ordering, categorizing, relating, inferring, and applying. • Demonstrate skills in the area of speaking, listening, writing, reading, graphing, mapping and mathematics. • Evaluate the contributions of science and technology and their relevance to improving our daily lives in preparation for the future. • Establish the relevance of science and its applications to careers and real-life situations. • Recognize the issues of statistical variability and the need for controlled tests.* • Recognize the cumulative nature of scientific evidence.* • Analyze situations and solve problems that require combining and applying concepts from more than one area of science.* • Investigate a science-based societal issue by researching the literature, analyzing data, and communicating the findings. Examples of issues include irradiation of food, cloning of animals by somatic cell nuclear transfer, choice of energy sources, and land and water use decisions in California.* • Know that when an observation does not agree with an accepted scientific theory, the observation is sometimes mistaken or fraudulent (e.g., the Piltdown Man fossil or unidentified flying objects) and that the theory is sometimes wrong (e.g., the Ptolemaic model of the movement of the Sun, Moon, and planets).* • Select and use appropriate tools and technology (such as computer-linked probes, spreadsheets, and graphing calculators) to perform tests, collect data, analyze relationships, and display data.*

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| | <ul style="list-style-type: none">• Describe how to provide service to the marine science community through community service activities.• Research current topics and discoveries in marine science. |
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