

MARINE SCIENCE A & B - MR. DAVIS 2013 - 2014



How does the Moon affect the tide? What does a view of Earth from space have to do with marine science? How does the topography of the ocean floor affect the marine life found there? What is chemosynthesis? Why are there sand dunes at Guadalupe but not at Avila? What is a polyplacophoran?...

These questions and more will be answered this year!

Instructor Info: Scott Davis

Email: sdavis@righetti.us **Web address:** <http://scottdavis.wix.com/science>

Homework calendar: http://www.keepandshare.com/calendar/show_month.php?i=1232249&lang=

I do not answer the phone in my room during class, and I don't encourage this form of communication as much as email. Homework assignments will be posted on the web address. I recommend you bookmark the page which will allow you to check homework, get extra notes, find resources, and print things.

Course Materials:

Texts: *Oceanography: A View of the Earth, 5th ed.* M. Grant Gross (Textbooks must be covered!)

2nd semester text : *Marine Biology 5th ed* Castro & Huber (We may get these 1st semester too.)

COURSE PREREQUISITES: *Passing scores in Earth Science (or its equivalent) and at least 1 semester of Biology with a grade "C" or better.*

Videos/DVDs – We will watch several awesome videos this year. They are all rated appropriately.

Class trip?:

In years past, a marine science field trip has been organized and has been open to the first X number of students who have paid and turned in release forms, but in the current state of the budget, there are little or no financial resources available. If we as a class wish to have a field trip, we will need help and support from parents and adults. We'll talk in class and information should be sent home when decisions are made. Class trips are always optional only, so if a student is unable to attend, their grade is not affected. I reserve the right to refuse to allow any student to participate on a class field trip due to concerns of safety or attitude, regardless of whether or not they have paid or are first to sign up.

Parents, if you are a part of a service organization that might be willing to donate funds (or wish to yourself...a great tax deduction!) for educational field trips, please contact me or check the box on the Safety Syllabus Response Form so that I may follow up on this. THANK YOU!!!!!!☺

Materials Required: #2 pencil, colored pencils, notebook (see below), paper, calculator with simple scientific capabilities, access to a computer or typing instrument.

Recommended Materials: Colored pencils at home, internet access, 3x5 cards (for 2nd semester)

Course Description & General Information:

Marine science is a year-long elective course designed to focus on the science involved with our oceans. This includes a mix of physical and biological science topics which will be presented to better understand the dynamics of the marine environment. This is a college preparatory elective class and is designed to help prepare the learner for entry into the college physical & biological sciences. The goal of this course is to provide the learner with foundations for understanding the following scientific areas:

First Semester:

- History of oceanography
- Classification of ocean basins and plate tectonics
- Atmosphere and climate
- Seawater chemistry and attributes
- Waves, currents, and tides
- The coastal ocean
- Astronomical aspects & Earth history

Second Semester:

- Basic biochemical processes
- Phylogenetic study of major taxa
- Plankton, nekton, & benthic organisms
- Tools of investigation & experimentation
- Basic MLA style documentation in a formal written research paper & presentation of info

Laboratory experiments, lab write-ups, notes, homework, and class participation will be key student activities for individual success in marine science. In addition, nightly reading assignments in the textbook and resources online will aid and enhance student comprehension. A lot of memorization will take place 2nd semester so nightly review is important! There will be a quiz every week 2nd semester!

Grading Policy:

There are several components which make up the student's final class grade. **Read each section below thoroughly so you know what is expected!** Grades may be posted on the website by secret number. Listen in class for more details or check out the webpage.

General Information:

Class grades are recorded as a running total of points as compared to the total possible points. At the end of a grading period, the student's total points are divided by the total possible to determine the percentage of points earned. Letter grades are then assigned based upon a standard grading scale of:

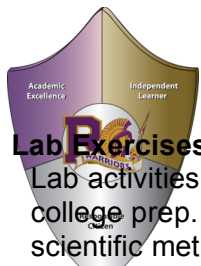
90 to 100% of all possible points earned -----> A 80 to 89% of all possible points earned -----> B

70 to 79% of all possible points earned -----> C 60 to 69% of all possible points earned -----> D

Earning below 60% of all possible points is considered **failing** and will require repetition of the course.

Tests & Quizzes:

Tests will be given at the completion of each major unit. Tests are **always** announced in advance so students can prepare and study! Test scores may be adjusted by the instructor by making a highest score the maximum points possible. Adjustments will never hurt a student's score. Quizzes may occasionally be "pop" and unannounced. They may cover videos, homework assignments from the night before, reading, and major ideas discussed. NO ipods, mp3 players, cell phones, or other electronic devices may be on or touched during a quiz or test. **I reserve the right to cut headphone cords of forgetful music listeners! I will not replace them!** (Be sure you read this-it is the warning!)



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Lab Exercises:

Lab activities accompany some units and will require a write up as specified by the instructor. This is a college prep. class and as such, labs may require a typed formal write up with proper English skills, scientific method, appropriate charts and graphs, and individual thought.

LAB SAFETY is always the number one concern. If you are removed from a lab, you will receive a zero with NO make-up possibilities. Severe disturbances may result in the loss of all lab privileges for the year.

Homework:

Homework is an essential part of “getting it” in science. As such, homework is frequently assigned. Student homework is to be turned in on or before the announced due date for credit. **UNLESS OTHERWISE DIRECTED BY THE INSTRUCTOR**, homework is to be completed **outside of class**. Late homework is not accepted. Oftentimes homework is to study and review...this should be done as marine science builds on what was already learned. Being a college prep class, emphasis is on fewer larger-point assignments rather than lots of little ones.

Cheating Policy: In general look at the Student/Parent Handbook. Cheating isn't acceptable! Don't do it!

Academic Integrity:

It is the expectation that you will be **in class, on time, be prepared for class, be respectful**, do your **OWN work**, and be a **positive** contributor in the classroom! Those who do not uphold this academic integrity may not be allowed to participate in class until a parent conference or other appropriate action is completed.

Discipline:

All necessary disciplinary action should be in accordance with the policy as described in the *Handbook*. However, *classroom* guidelines must also be followed to promote a safe and effective educational environment. Act appropriately! **Electronics are not to be used in class** unless I okay it in advance.

Parents, please promote your kid's academic success by requesting they **not use their phones** or other electronics during class time...**Please don't text/call your student during class!** Thank you for your politeness!

Special Requirements:

Reports/Papers:

At least one formal type-written report will be assigned this year. Formal report guidelines will be provided. English is a tool for communication of ideas. As this is a college prep. class, it is expected that well written, correct papers with proper citations will be turned in for the formal report. **Feel free to have an English instructor help you proofread and check over your paper before you turn it in to me!** Late papers will be heavily penalized, so plan to turn it in early or on-time. Pay attention to guidelines so that you have met requirements for sources, length, style, graphics, and over-all presentation. An oral-report component is expected.

Participation:

A 10% portion of the final grade may be based on participation. Factors that affect participation include **attendance**, homework, behavior, and appropriate classroom actions. Cheating, fighting, tardies & cuts, graffiti, disturbing the class, use of electronics, and removal are not tolerated and will result in loss of points.

Notebook:

Each marine science student should obtain and maintain a marine science notebook stocked with lined paper for note taking. All papers, notes, handouts, returned items, labs, and other marine science related materials should be kept in this notebook. Periodically, a notebook/portfolio check of contents and organization will be a graded activity. Please be sure to keep your notebook organized and listen to directions as given in class. **NEVER THROW ANYTHING AWAY** until told to! ☺

Attendance, Make-ups, & Extra Credit:

BE IN CLASS ON TIME! These three words are a student's best friend in school. Success in any school is directly related to attendance. Science offers many challenging ideas and concepts which a student must grasp. Being in class and participating will ensure that these concepts are understood—you may **always ask questions!!!** Only *officially excused absences* will be able to be made up for points. It is the student's responsibility to obtain work before leaving on a trip and to get it immediately upon return from an absence. **Excused absences** during a test will result in the administration of a make-up exam, which are almost never the same as the original test and may take in to account the “extra studying time” that the student had. If a student knows he or she will be gone, inform the instructor so that he can give assignments in advance or make early test arrangements. **The 2nd semester lab final will have no make-up opportunities. Please be prepared to take this exam in June.** Details later.

Extra credit is just that...*extra!* Extra credit is not offered in lieu of regular assignments. Extra credit opportunities may be given periodically. Students who have completed all their assignments and **have no blank scores** may request extra credit as a grade-enhancing tool.

MORE HELP:

Please ask questions! All of the science teachers are here to help you learn. I am available in the room or in the Science Department Office (next door to our room) at lunch and other announced times. Please make arrangements with me and I will be happy to meet with you. Feel free to ask any of the science teachers for help...that's what they are there for...Mrs. Sportsman & Mrs. Wingerden are all very adept with marine issues and will be able to point you in the right direction. Don't forget the webpage: <http://scottdavis.wix.com/science> for useful info.

GOOD LUCK & LET'S HAVE A GREAT YEAR!



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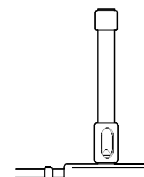
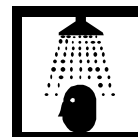
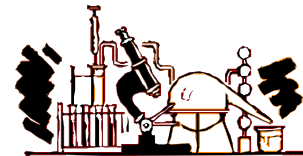
MARINE SCIENCE SAFETY - SYLLABUS RESPONSE FORM

Science Laboratory Safety & Expectations

These regulations must be read and signed by each student and their parents/guardians before the student may begin lab activities. This page may be retained in the student notebook, but the acknowledgement page must be signed and filed by the instructor before the student may participate in labs.

GENERAL RULES:

- 1. Perform only laboratory activities for which instructions and permission have been given.
2. Use serious and appropriate behavior unless instructed otherwise.
3. Always wear safety gear as instructed by the teacher.
Close-toed shoes and non-bulky clothing should be worn on announced lab days.
4. Report all accidents and incidents immediately to the instructor.
5. No food or drink is allowed in lab (or in class!) including gum.
6. Follow all classroom rules.
7. Know the locations of all emergency exits, fire extinguishers, fire blankets, and emergency eye-wash or showers.



HANDLING EQUIPMENT:

- 1. Use equipment only after you have been instructed on its proper use.
2. Never drink out of lab glassware.
3. When using electrical current, avoid bringing both hands in contact with live sections of the circuit.
4. When heating, use Bunsen burners or alcohol burners with extreme caution.
Light burners only as instructed and always turn them off when not in use. Do not bring anything in contact with the flame unless directed to by the instructor.
5. When heating using a test tube, do not look into the tube or point it at others.
6. Some chemicals used may be poisonous or dangerous if swallowed, ingested, or come in contact with skin. Listen to all instructions before using any chemical. Dispose of all chemicals as instructed only!
7. Always add acid to water slowly. NEVER THE REVERSE!
8. Observe all SAFETY SIGNS and instructions.



In the event the teacher is involved in an emergency situation, a student from lab group one will notify the office at (937-2051) ex. _____ AND the teacher next door, _____.

STUDENTS & PARENTS:

Please sign and return this top portion of this form as your affirmation that you have read and understand the content of the blue syllabus and the safety items presented here and commit to following all class guidelines. Parents, please know that you acknowledge that your student's grade is strictly his/her responsibility. Grade reports are mailed home...keep on your students to stay informed!

STUDENT NAME: _____ STUDENT SIGNATURE: _____

PARENT/GUARDIAN SIGNATURE: _____ Date: _____

Contact Information: Parent E-mail: _____

llene por favor información de contacto para usted mismo e indique que usted solicita las correspondencias españolas. [] Si, Español [] No, English is fine.

Address you wish letters to be sent to: _____
Number Street City Zip

(It is my policy to notify parents of disciplinary actions or attendance issues via letter. Thank you for your help.)

Other information I wish to give Mr. Davis, or he should know about my student: (optional)

I am willing to help with (check any) [] field trip organization, [] fundraising, or [] chaperoning. [] Sorry, no
[] I am a member of a service organization which might be able to donate funds for bus costs and am willing to provide you contacts and information about who to talk to. Contact: _____

----- ✂ -----detach & return top portion, keep bottom-----

Dear Parents and Guardians,
I am looking forward to working with your student this year! Marine science is a very interesting subject and so important to us living here on the Central Coast. Being a college prep elective, we will cover many topics, which will prepare the student for college science courses. This class will introduce lab styles and test styles similar to college level formats. I hope to be able to offer a field trip, and will ask your support and help when the time comes.
With bizarre requirements from the state, your junior kids will most likely be tested (STAR) in earth science because there is no marine science test. Please write your representative with your concerns or respond to the department of education at www.cde.ca.gov.
Please acknowledge the fact that you and your student have read and discussed the course expectations and outline (the blue sheets), as well as the Science Laboratory Safety & Expectations (above) by signing and returning this letter to me. Feel free to remove this bottom portion and keep for your records and information. I invite any questions or concerns you may have for me. You may reach me here at Righetti by e-mail at: sdavis@righetti.us (which is the email address for the staff members...initiallastname@righetti.us).
I look forward to meeting you at Back to School Night, Wednesday, August 28. Please mark your calendars now! Thank you for your help in making your student's academic career a strong one. Don't forget the homework website:
http://www.keepandshare.com/calendar/show_month.php?i=1232249&lang= ...Scott Davis, science teacher