

2018-2019

MARINE SCIENCE AT SEAWORLD HANDBOOK

Marine Science 1 - 2002500

Marine Science 1 Honors - 2002510



SCIENCE PARTNERS

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SCIENCE PARTNERS

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"The earth is full of Thy creations. So is this great and wide sea, teeming with life of every kind, both great and small." **Psalm 104:24-25**

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Science Philosophy

All science is taught from a **Creationist, Christian, Biblical worldview** while making students aware of other worldviews. The objective is to teach students to see the Hand of the Creator in all of nature. Classes are instructional, while stressing hands-on lab activities during each class.

Dates for Orientation, Classes, Field Trips, and Project Presentations

Orientation: Monday, August 13, from 7:00 – 8:00 PM at **WaterStone Church, 900 North Street, Longwood, FL 32750.**

After Orientation, MSSW meets 12 times during the school year: Classes meet once a month on a Friday from August through May (10 classes). **Except for August, the classes and field trips meet on the second Friday of each month.**

- Six **Friday** classes meet at **SeaWorld** from 9:45 AM to 2:00 PM: **September 14, October 12, December 14, January 11, April 12, and May 10.**
- Two **Friday** classes meet at **WaterStone Church in Longwood** from 9:45 AM to 2:00 PM: **August 24 and February 8.**
- Two **Friday** all-day class / field trips: **November 9** from 6:00 AM to 3:00 PM and **March 8** from 7:45 AM to 4:00 PM.
- Two **Monday** evening semester project presentations at **WaterStone Church** at 7:00 PM: **November 26** and **April 29.**

MARK THESE 12 DATES ON YOUR CALENDAR! THEY MUST BE A PRIORITY!
If you have ANY conflicts, including sports, drama, speech, debate, family vacations, church youth group, competitions, etc., PLEASE DO NOT ENROLL.

Goals

- To develop critical thinking skills.
- To allow students to become “experts” in a particular field of marine science and to become highly knowledgeable of SeaWorld.
- To prepare students for possible future employment and/or a career at a marine life park or in some field of marine science.
- To allow students to work independently on self-directed projects that will be presented publicly to family and peers.
- To allow students to develop and reinforce a Christian, Biblical worldview of the Creation in the special environment of the sea.

Directions to SeaWorld, 7007 SeaWorld Drive, Orlando, FL 32821

Parents who drop off/pick up students do NOT need to go to SeaWorld’s main gate and pay to park. Use SeaWorld’s Bus/Taxi entrance on Sea Harbor Drive:

- From the intersection of the Beachline / Highway 528 and International Drive, go south on International Drive for two blocks.
- Turn right at the light onto Sea Harbor Drive.
- Take the third entrance on the left, past the Harcourt Building on the right. You will see the “Bus/Taxi” sign in the median.

Students who drive themselves need to use SeaWorld’s main entrance on Central Florida Parkway. Enter, park, and walk over to the Bus / Taxi drop off where we meet.

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Class Information



Overview

Mr. and Mrs. Clifton look forward to another exciting year studying marine science with high school homeschoolers at one of the largest marine life parks in the world. It was Mr. Clifton's privilege to spend several years setting up and working as head of the Education Department at SeaWorld Orlando, observing some of the most exotic animals and plants on earth. As far as we know, no other class like this is being taught anywhere! We hope you are never the same as a result of discovering truths about God's creations that live in and around the sea.

Marine Science at SeaWorld is offered for students who have successfully completed high school biology. Each student needs a SeaWorld annual pass that is good through the end of the school year. A supplemental book, *The Ocean Book*, by Frank Sherwin, will be provided for students to use at home during the year. Involvement in discussions, projects, research, lab activities, field trips, and homework, as well as a working knowledge of SeaWorld, will hopefully spark a lifelong interest in learning about the natural world to see the "handprint" of the Creator. Ultimately, it is our desire for every student to ask not only, "How and why was the universe made?" but more importantly, "Why was I made?"

Attendance:

The last page of this handbook has a master calendar with class, field trip, and presentation dates listed, as well as reading assignments and report due dates. ***These dates need to be calendared for the entire year and set as a priority!*** Since there are only ten classes and two project presentations, it is imperative that students be in attendance and on time for every scheduled event. As you can understand, it is impossible to recreate the unique experience if a class, a project presentation, or a field trip is missed. ***If you know that you will miss more than one activity during the year, we would advise you to wait and take the class another year when you can participate fully.***

Punctuality:

Plan to arrive five to ten minutes early so we can begin class on time. ***If you arrive late, call our cell number (407-808-4458) to find out where to meet the class.*** Our agenda is full, and we do not have time to wait on late students. It is not fair to the others who arrive on time.

Homework:

Good writing skills are essential. Assignments may include, but are not limited to, completing lab activities begun in class, lab/homework assignments, monthly reading assignments, monthly tests, and work on semester projects.

VERY IMPORTANT: LATE WORK IS NOT ACCEPTED!

Homework must be turned in on the due date. ***If a student is absent due to illness or family emergency only***, his or her homework must be mailed to Science Partners, 343 Allison Ave., Longwood 32750 and ***postmarked by the class date!*** ***IF A STUDENT IS ABSENT FOR ANY REASON OTHER THAN ILLNESS OR FAMILY EMERGENCY, HOMEWORK FOR THAT MONTH WILL NOT BE ACCEPTED.***

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Class Information (continued)



Make-up Class: If a student is absent for illness or family emergency only, he or she is responsible for contacting Mr. or Mrs. Clifton to set up a make-up class as soon as possible. If a make-up class is not possible, or if the absence is not related to illness or family emergency, the student needs to arrange to receive missed handouts from the class.

Grades/Credit: This class meets Florida Department of Education's *Next Generation Sunshine State Standards* for Marine Science 1 - 2002500. With extra assignments, a student may earn honors designation for Marine Science Honors 1 - 2002510. Science Partners cannot issue credit, but will return graded homework, tests, and project assignments as well as issue a grade sheet on a monthly basis. Grades are based on homework assignments, tests, class preparation, and semester projects (project, written report, and oral presentation). Parents are responsible for applying for credit from their county or umbrella school / private school covering.

Email: Science Partners uses email for much of the communication between class and home. **Each family must have an active email account that will accept attachments.** It is imperative that you check your email frequently for information on assignments as well as reminders and notices about classes, field trips, presentations, etc.

Cell Phones: Cell phone calls and texting are disruptive and are not allowed during class time. In case of emergency, parents may call or text Science Partners' cell phone number, 407-808-4458, at any time, and we will relay the message to the student.

Lunch / Water: Classes will take a short lunch break. SeaWorld does not allow whole sandwiches to be brought into the park. However, students may bring a sandwich cut into pieces, any kind of snacks, and water. Students are encouraged to bring their own water.

Semester Field Trips: Each semester, students will participate in an ***all-day field trip***. ***Please note that times and meeting places are different from regular class times!*** Parents are needed to drive / chaperone. Students may not drive and we cannot accommodate siblings on these field trips. All entrance fees will be covered for students and parent drivers of multiple students. Details will be announced and handouts sent home.

- ***Class 4 / November 9*** – This class / field trip will focus on *Sirenians* as we snorkel with manatees out of Crystal River, from **6:00 AM – 3:00 PM**.
- ***Class 8 / March 8*** – This class / field trip will focus on *Florida's Marine Habitats* as we visit Canaveral National Seashore, Merritt Island National Wildlife Refuge, Indian River Lagoon, and St. Johns River, from **7:45 AM – 4:00 PM**.

Semester Projects / Presentations: Students are assigned a project each semester to be presented publicly to families and peers at WaterStone Church in Longwood. These projects also include a written report and oral presentation.

- ***Semester 1 Project Presentation*** – Monday, November 26, at 7:00 PM.
- ***Semester 2 Project Presentation*** – Monday, April 29, at 7:00 PM

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Dress Code / Uniform



Dress Code:

The intention of our science class is to promote a Christian atmosphere and attitude of learning about the marine world that God has created. It is not designed to be a fashion statement of the culture. Therefore, students need to dress appropriately. We will be interacting with SeaWorld personnel, as well as the general public. It is important that we set a good example for others since we represent a wholesome, Christian lifestyle. Our presence in the park is a testimony of who we are and Whose we are. In order to dress for **modesty, mobility, and safety**, science students are required to wear a uniform. It consists of:

1. **Shirt:** The uniform shirt is a navy polo-type shirt with collar and buttons.
2. **Pants:** Khaki / tan / beige colored shorts or long pants (no “hip-huggers” or “low riders”). Shorts must come close to the knee. Girls may also wear Capri pants (no skirts, skorts, culottes).
3. **Shoes:** We will be doing *lots of walking* at SeaWorld. Comfortable shoes that have closed toe and heel are a must. No sandals, flip-flops, or skate shoes.
4. **Nametag:** It is important that we are easily recognized as a class. Nametags with our cell phone number will be provided for the students to use during the year.
5. **Special Note:** Students may not wear visible body piercings (with the exception of girls’ ear lobes) or tattoos.

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Registration Fee & Tuition Information



Registration Fee

The registration fee for Marine Science at SeaWorld is \$150 for a single student or \$125 per student for families with two or more students enrolling (for example, two siblings would be \$125 each or \$250 total; three siblings would be \$125 each or \$375 total). This fee covers use of *The Ocean Book*, lab equipment, supplies, field trips, and project presentations. ***Books are to be returned at the end of the school year or may be purchased for \$10.00 plus tax. (Suggested retail price for this book is \$16.00 plus tax.)***

Tuition

Tuition is \$850 per year per student or \$85 per month for ten months. **You may save \$25 by making a single tuition payment of \$825 by the first class.** Monthly tuition is due on the class day each month from August through May and is late one week after the class. Please make check or money order payable to **Science Partners**. Tuition may be turned in during class or mailed to *Science Partners*, 343 Allison Avenue, Longwood, FL 32750.

Please Note: Unless a student withdraws from class, tuition is due – whether or not the student attends or is absent from a class.

Tuition Late Fee

A \$5 per student late fee is due for each monthly tuition payment that is not made within one week of the regular class date (August through May).

Cash Payments

If you pay by cash, please place your payment in an envelope, seal it carefully, and ***clearly indicate the student's name and what the payment covers on the outside of the envelope.*** Science Partners will send an email confirmation for cash received.

Check or Money Order Payments

If you pay by check or money order, please make your check or money order payable to **Science Partners**. When you make a payment to Science Partners, whether it is for registration fees, tuition, late fees, returned check fees, field trip registrations, creation resources, etc., you may combine all payments into one check or money order if you wish. Please note on the "Memo" line what items your payment covers.

Returned Checks

A ***returned check fee*** will be assessed to cover bank charges to Science Partners for each check returned for insufficient funds. ***After three checks are returned, your tuition must be paid by cash or money order only.***

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Supply / Check List



Supply List for MSSW

Make sure you have all the items listed below and bring them to each class!

- Nametag**, provided by Science Partners. Wear to each class and field trip unless instructed otherwise.
- SeaWorld Annual Pass** that is good through the end of the school year. Keep pass in your nametag.
- Backpack**. SeaWorld security may search backpacks before we enter the park.
- Three-ring Binder Notebook** dedicated to marine science. See specific instructions on page 9 for setting up notebook.
- Zippered Pencil Pouch** placed in notebook rings to hold the following items:
 - Colored Pencils**. We do not use markers or crayons in science.
 - Two Mechanical Pencils and Extra Lead**. We do not use ink in science.
- Lined Notebook Paper**.
- Twelve Dividers**. Ten class dividers labeled *1 – 10*, plus two project dividers labeled *Sem. 1 Project* and *Sem. 2 Project*.
- Homework Assignments Due**. A list of assignments due for the next class will be emailed to students during the week after each class. A reminder will be sent during the week before the next class.
- Tuition**, unless it has been paid for the entire year or mailed ahead of time to Science Partners.
- Lunch/Drink**. Bring your lunch and drink. SeaWorld does not allow whole sandwiches. However, students may bring a sandwich cut into pieces, any kind of snacks, and water. For the safety of SeaWorld's animals, **NO** glass or straws are allowed in the park. **We have a full agenda and do NOT have time to wait in line to purchase food or drinks.** There are water fountains at SeaWorld, but students are encouraged to bring their own water.
- Rain Poncho**. Rain occurs often in Florida. Ponchos allow our class to carry on.
- Uniform**. See *Dress Code* information on page 6.
- Optional Items**: Sunglasses, sunscreen, camera to record material for your projects.

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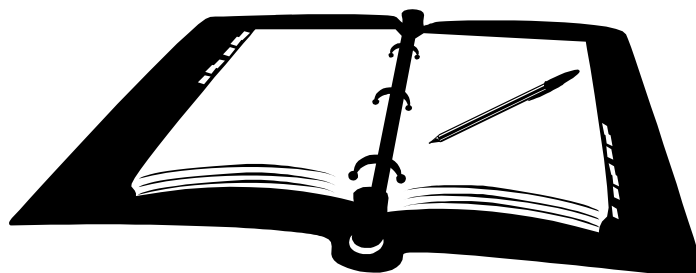
Notebook Instructions



MSSW Notebook Instructions

Please read carefully, even if you have been in science classes before. Make sure you have all the items on the Supply List on page 8. Then follow the instructions below to put together a marine science notebook that will be used during the year to hold lab sheets, handouts, notes, observation sheets, field trip information, semester project information, and other communications from Science Partners. When the notebook is set up correctly, most of the supplies that are needed for class will be together in one place and ready to go. At the end of the year, the notebook will be the student's marine science portfolio.

1. **Notebook:** Students need a three-ring binder that has clear sleeves on the front and back covers. Any color is fine.
2. **Notebook Front Cover:** The MSSW notebook cover sheet is located on the next page of this handbook. Print it and fill in the lines with student's name and student and/or family phone numbers. Then, slip it into the front sleeve of your notebook.
3. **Notebook Back Cover:** The MSSW calendar is on the last page of this handbook. It includes class dates, field trip dates, semester project dates, report due dates, and contact information for the Cliftons. Place your calendar in the back sleeve of your notebook so it is easily accessible and doesn't get torn or lost inside. ***It's a good idea to keep another copy of the calendar at home for parent reference.***
4. **Zippered Pencil Pouch:** The first item inside the notebook is a zippered pencil pouch to hold student's colored pencils, two mechanical pencils, and extra pencil lead. A plastic box with items inside will not work for our purposes. The zippered pencil pouch filled with supplies listed must stay in the marine science notebook and be brought to every class.
5. **Lined Notebook Paper** goes behind zippered pencil pouch.
6. **Twelve Dividers:** Ten class dividers labeled 1 - 10, plus two project dividers labeled *Sem. 1 Project* and *Sem. 2 Project*.
7. **"Clipboard"** will be handed out at orientation. It will be used for lab activities and animal observations during classes. Keep it in the back of your MSSW notebook.



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Marine Science 1 - 2002500

Marine Science 1 Honors - 2002510



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Cell / Text: 407-808-4458

E-mail: sciencepartners@cfl.rr.com

Web Site: www.sciencepartners.net

Student's Name: _____

Phone (1): _____

Phone (2): _____



Marine Science at SeaWorld

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It is imperative that you prioritize these dates and attend each event!

Dates	Meetings	Classes, Field Trips, Project Presentations, Locations, and Times	Reading Assignments
Monday, Aug. 13	Orientation	WaterStone Church, 900 North Street, Longwood, 7:00 PM.	Introduction
Friday, Aug. 24	Class 1	Introduction to Marine Science / Oceanography. WaterStone Church, 9:45 AM - 2:00 PM.	Chapter 1
Friday, Sept. 14	Class 2	"Ich-theology" – Osteichthyes (Bony Fish); Chondrichthyes (Cartilaginous Fish). SeaWorld, 9:45 AM – 2:00 PM. Honors 1 Paper Due.	Chapter 2
Friday, Oct. 12	Class 3	Pinnipeds (Seals, Sea Lions, Walruses); Marine Invertebrates. SeaWorld, 9:45 AM – 2:00 PM. Semester 1 Report Due.	Chapter 3
Friday, Nov. 9	Class 4 Field Trip	*FIELD TRIP - Snorkel with Manatees: Crystal River. 6:00 AM – 3:00 PM. Honors 2 Paper Due.	Chapter 4
Monday, Nov. 26	Semester 1 Projects	SEMESTER 1 PROJECT PRESENTATIONS. WaterStone Church, 7:00 PM.	
Friday, Dec. 14	Class 5	Marine Animal Behavior – Part 1. SeaWorld, 9:45 AM – 2:00 PM.	Chapter 5
Friday, Jan. 11	Class 6	Marine Animal Behavior – Part 2. SeaWorld, 9:45 AM – 2:00 PM.	Chapter 6
Friday, Feb. 8	Class 7	"Orni-theology" – Aves (Birds); Marine Reptiles. WaterStone Church, 9:45 AM – 2:00 PM. Honors 3 Paper Due.	Chapter 7
Friday, Mar. 8	Class 8 Field Trip	*FIELD TRIP – FL's Marine Habitats: Canaveral National Seashore, Merritt Island NWR, Indian River Lagoon, and St. Johns River. 7:45 AM – 4:00. Semester 2 Report Due.	Chapter 8
Friday, Apr. 12	Class 9	Cetaceans (Whales and Dolphins). SeaWorld, 9:45 AM – 2:00. Honors 4 Paper Due.	Chapter 9
Monday, Apr. 29	Semester 2 Projects	SEMESTER 2 PROJECT PRESENTATIONS. WaterStone Church, 7:00 PM.	Chapter 10
Friday, May 10	Class 10	Arctic and Antarctic Ecosystems; Animal Husbandry. SeaWorld, 9:45 AM – 2:00.	

Class topics are subject to being rearranged because of SeaWorld's scheduling.

****Detailed information for the two all-day field trips will be handed out as each date approaches.***

Parents are needed to drive. Students may not drive and we cannot accommodate siblings.

For field trips, all entrance fees for students and parent drivers of multiple students will be covered.