



**Course:** Florida Marine Studies  
**Age Group:** 6th – 12th Grade (This class will be taught at a high school level.)  
**Min. Size:** 5 students  
**Instructor:** Ms. Christa Jewett  
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**Cost:** There is a cost of \$320 per student for this Course. Expenses associated with the field days are additional. See detail below.

**Dates:** Friday, May 29, Friday, June 12, Friday, July 10, Friday, August 21, and Friday, August 28  
*(Dates vary based on tide schedule.)*

**Time:** Field Days: 9:00 AM – 1:30 PM  
 Class Day: 9:00 AM – 11:00 AM

**Location:** Will meet at various locations in Broward, Palm Beach and Miami-Dade Counties

**Materials:** Students will need their own snorkeling equipment, writing utensil and notebook. It is also recommended that students obtain copies of two different field guides:

- Florida’s Living Beaches by Blair & Dawn Witherington
- Reef Fish Identification: Florida, Caribbean, Bahamas by Paul Humann and Ned DeLoach

Saltwater Studies will have a few of these field guides on hand for the students to use but it will be beneficial for them to have access to their own copy. Since the Reef Fish Identification guide can be expensive, it is recommended that you obtain one from the library for your child’s use. All other field equipment and class materials will be provided by Saltwater Studies.

## SCHEDULE

Lesson #1		Date: May 29, 2015
<b>Topic</b>	Sandy Beaches	
<b>Homework (To Be Completed Prior to Field Day)</b>	<ul style="list-style-type: none"> <li>• Memorize Matthew 7:24-27</li> <li>• Online reading, videos and questions on appropriate topics.</li> <li>• Review procedures for field day tasks to prepare for field day activities.</li> </ul>	
<b>Field Day Description:</b>	Study of Species Composition, Density, Distribution and Abundance.  Tasks: Performing a shore-based biological assessment  Methods Discussed: Transect & Quadrat Method  Expenses: \$1.75/hour parking fee (change required for meter)	
<b>Meeting Location:</b>	Delray Beach <i>We will meet at Delray Beach, north of Atlantic Avenue, at the intersection of A1A and Laing Street.</i>	

<b>Lesson #2</b>		<b>Date: Jun. 12, 2015</b>
<b>Topic</b>	Mangrove Forests	
<b>Homework (To Be Completed Prior to Field Day)</b>	<ul style="list-style-type: none"> <li>• Memorize Romans 5:6-8 and Romans 6:23</li> <li>• Prepare a Field Report for study completed on Day 1 to be discussed in next class.</li> <li>• Online reading, videos and questions on appropriate topics.</li> <li>• Review procedures for field day tasks to prepare for field day activities.</li> </ul>	
<b>Field Day Description:</b>	<p>Study of Species Composition, Density, Distribution and Abundance.</p> <p>Tasks: Organism Identification &amp; Quantification. Note kayaks will be used to access the mangrove forests from a water-based point of view.</p> <p>Methods Discussed: Visual Census</p> <p>Expenses: \$6/car entrance fee for the park Kayak Rental (TBD based on necessity)</p>	
<b>Meeting Location:</b>	<p>Oleta River State Park 3400 Northeast 163rd Street Miami, FL 33160-4460 <i>We will meet at Parking Lot #9 (the last parking lot).</i></p>	

<b>Lesson #3</b>		<b>Date: Jul. 10, 2015</b>
<b>Topic</b>	Rocky Shores	
<b>Homework (To Be Completed Prior to Field Day)</b>	<ul style="list-style-type: none"> <li>• Memorize Psalm 111:2, Romans 1:20 and Psalm 18:1-2</li> <li>• Prepare a Field Report for study completed on Day 2 to be discussed in next class.</li> <li>• Online reading, videos and questions on appropriate topics.</li> <li>• Review procedures for field day tasks to prepare for field day activities.</li> </ul>	
<b>Field Day Description:</b>	<p>Study of Species Composition, Density, Distribution and Abundance.</p> <p>Tasks: Organism Identification &amp; Quantification in Rocky Intertidal Zone</p> <p>Methods Discussed: Transect Method &amp; Quadrat Method</p> <p>Expenses: \$6/car entrance fee for the park</p>	
<b>Meeting Location:</b>	<p>John U. Lloyd Beach State Park 6503 N. Ocean Drive, Dania Beach, Florida 33004 <i>We will meet at the Jetty parking lot at the north end of the park.</i></p>	

<b>Lesson #4</b>		<b>Date: Aug. 21, 2015</b>
<b>Topic</b>	Coral Reef Ecology	
<b>Homework (To Be Completed Prior to Field Day)</b>	<ul style="list-style-type: none"> <li>• Memorize Psalm 32:7; Psalm 150:6 and Isaiah 41:10</li> <li>• Prepare a Field Report for study completed on Day 3 to be discussed in next class.</li> <li>• Online reading, videos and questions on appropriate topics.</li> <li>• Review procedures for field day tasks to prepare for field day activities.</li> </ul>	
<b>Field Day Description:</b>	<p>Study of fish assemblages in an artificial reef environment.</p> <p>Tasks: Fish identification and quantification. Students will be required to snorkel in order to complete their field activities.</p> <p>Methods Discussed: Visual Census</p> <p>Expenses: \$10/person fee for ferry ride to Peanut Island</p>	
<b>Meeting Location:</b>	Riviera Beach Municipal Marina 200 E. 13th Street, Riviera Beach, FL 33404 <i>We will meet at the Peanut Island Ferry.</i>	

<b>Lesson #5</b>		<b>Date: Aug. 28, 2015</b>
<b>Homework (To Be Completed Prior to Class Day)</b>	<ul style="list-style-type: none"> <li>• Prepare a Field Report for study completed on Day 4 to be discussed in next class.</li> <li>• Complete <i>Finding Nemo</i> project</li> <li>• Prepare field notebook for submission on last day of field course.</li> <li>• Prepare a 5-minute presentation summarizing a field report from one of the field days</li> </ul>	
<b>Class Day Description:</b>	This is the final class which will provide the students an opportunity to turn in their notebooks and homework assignments and offer a presentation discussing the information that they learned during the field course.	
<b>Meeting Location:</b>	To be determined. The class will meet at a central location that is located in either Broward or Palm Beach County.	

## CLASS OVERVIEW

Class Duration. Each field day will be 4.5 hours in length. Each class will include discussion on the homework material and appropriate topic, a 30-minute lunch break and field activities. The final class will meet in a classroom at a central location in either Broward or Palm Beach County. The purpose of this class is for the students to submit their notebooks and homework assignments and discuss the information they learned during the field course.

Each lesson, Saltwater Studies will focus on a different local marine environment and the marine organisms that inhabit that environment. The field activities associated with the lesson will teach students practical skills and scientific techniques that are employed to study each environment discussed.

Homework. Students will have homework to complete prior to each field day. This includes memorizing scripture appropriate to each week's topic and preparing to recite it the following field day, reading online material regarding each topic, reviewing field procedures for the following field day and preparing a Field Report based on the study completed during the previous field day to be discussed in next class. They will also need to prepare a 5-minute final presentation summarizing one of the day's field activities and data collected.

Grading Policy. The class will be graded based on the homework assignments, final presentation and the completion of a field notebook. During the last class, each student will hand in a notebook that includes their homework assignments and field activities. The notebook will be graded on neatness, organization, completion and detail. The student will earn up to 100 points for their notebook. At the completion of the session, the students will receive their notebooks, a course grade and a certificate of completion for their records.

Parental Permission Slip. Each student will need to provide a completed Parental Permission slip in order to participate in the field course.

Materials. Students will be provided with scientific field equipment and hand-outs. Students will be required to provide their own 3-ring binder with paper, writing utensil and Bible (NKJV or NIV, preferred) for the class. In regards to other equipment needed, students will be required to provide or rent their own kayaks for Lesson #2 and will also need to provide their own snorkeling equipment for Lesson #4.

Expenses. There are additional expenses associated with each field day such as park entrance fee, parking or transportation and kayak rental. These expenses are included in the schedule presented above.