Appendix A: Bloom's Taxonomy (from Stanny, 2016)

Lower order		**Higher order**			
I. Remember	II. Understand	III. Apply	IV. Analyze	V. Evaluate	VI. Create
Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, interpreting, giving descriptions, and stating main ideas.	Solve problems in new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing new solutions.
Arrange Copy Define Describe Identify Label List Locate Match Name Outline Quote Recall Recite Record Repeat Recognize Reproduce Retell Select State Tabulate Tell Visualize	Classify Describe Differentiate Discuss Distinguish Explain Extend Generalize Give an example Group Illustrate Indicate Infer Interpret Organize Order Paraphrase Report Restate Review Rewrite Select Show Summarize Translate	Calculate Chart Choose Compile Compute Construct Demonstrate Diagnose Interpret Modify Predict Prepare Relate Show Solve Teach Transfer Use Write	Appraise Break Down Categorize Classify Compare Conclude Connect Contrast Correlate Criticize Deconstruct Deduce Diagram Discriminate Dissect Evaluate Map Outline Prioritize Role-play Separate Subdivide Survey Test	Argue Assess Choose Consider Convince Criticize Critique Debate Decide Defend Editorialize Find errors Grade Judge Justify Persuade Rate Rearrange Reorganize Recommend Reframe Score Support Weigh	Adapt Anticipate Assemble Collaborate Combine Compose Construct Design Develop Devise Express Facilitate Formulate Hypothesize infer Integrate Intervene Invent Negotiate Originate Plan Prepare Produce Propose Report Revise Simulate Speculate Structure Validate Write

Appendix B

Program	Location	Brief Description
Aquarium Exploration	Aquarium - Indoor	Through individual and small group activities, students observe form and function while discussing the diversity and ecological significance of fishes and invertebrates found in Georgia's coastal waters.
Aquarium Behind the Scenes	Aquarium - Indoor	Extend a scheduled Aquarium Exploration with an informative tour of the aquarium work spaces and a discussion of the methods used for caring for animals on exhibit.
Touch Tanks	Aquarium - Indoor	Students observe and handle live invertebrates, typically including whelks, sea stars, spider crabs, hermit crabs and horseshoe crabs.
Intro to Fishes	Auditorium - Indoor	Using preserved specimens and skulls, students discover the secret lives of fishes during this interactive discussion session.
Intro to Georgia Coast	Auditorium - Indoor	This program reviews the physical and biological processes that shape the Georgia coast.
Intro to Salt Marsh	Auditorium - Indoor	Discover what lives in the salt marsh and review the physical, biological and chemical processes that define a salt marsh and determine the diversity of species and ecological structure found in these tidally influenced wetlands.
Marine Debris 101	Auditorium - Indoor	Students learn about the sources of marine debris and the ocean processes (such as tides and currents) that influence the type, amount and frequency of plastic debris accumulating along Georgia's coast.
Coastal Reptiles	Auditorium - Indoor	Learn about the characteristics of this ancient group of vertebrates that have allowed them to survive for hundreds of millions of years.
Fish Dissection	Laboratory - Indoor	Students compare features of a fish's lifestyle to those of humans and other organisms in order to learn how fish are specifically adapted for life in the water.
Microplastics	Laboratory - Indoor	Students explore the prevalence of microplastics in sediments, aquatic environments and marine biota.
Fish ID	Laboratory - Indoor	Using dichotomous keys, students identify fishes based on external features.
Gyotaku	Laboratory - Indoor	The time-honored art of Gyotaku has been practiced for utilitarian and creative reasons for centuries.
Invertebrate Lab	Laboratory - Indoor	Sample the invertebrate community found living beneath the water line on floating docks.
Squid Dissection	Laboratory - Indoor	Investigate squid form and function thorough dissection and discussion of internal anatomy with a guided activity sheet.
Oyster: The Fanatic Filterers	Laboratory - Indoor	Students take a close look at this keystone species as they dissect and identify the internal filtering features of an oyster and calculate filtering rates of live oysters.
Plankton Lab	Laboratory - Indoor	Students learn how marine animals and plants are part of the plankton community and how they reproduce.
Horseshoe Crab Discovery	Laboratory - Indoor	Discover the ecological and economical importance of horseshoe crabs using live specimens and natural artifacts.
Barrier Island	Water - Outdoor	Travel by boat to a wild and remote barrier island. Bottlenose dolphins, sea birds and bald eagle nests are often seen along the way.
Estuary	Water - Outdoor	Students sample the benthic communities found in tidal rivers and sounds, then identify, sort, count and record species, environmental and positional data.
Scientific Sampling	Water - Outdoor	This study aboard the R/V Sea Dawg emphasizes the biological communities of an estuary and the abundance and diversity of organisms living there.
Bottlenose Dolphin	Water - Outdoor	Following an introductory discussion on cetacean biology, students board skiffs to explore coastal waters while searching for dolphins.
Oyster Reef	Water -	Travel by skiff to a nearby island and investigate oyster reef communities and their

Habitat	Outdoor	importance to the larger estuarine ecosystem.
Marine Debris on Barrier Islands	Water - Outdoor	Students collect marine debris at designated sandy beach sites using NOAA shoreline survey protocols.
Maritime Forest Study	Land - Outdoor	Hike through on-site transitional and mature maritime forests to experience coastal Georgia's climax plant community.
Salt Marsh Study	Land - Outdoor	Students discuss the importance of the marsh ecosystem to the coastal systems of Georgia.
Salt Marsh Transect	Land - Outdoor	Students put their knowledge to practical use in this field study in order to gain a broad perspective of salt marsh zonation and ecology.
Developed Barrier Island	Land - Outdoor	Students explore the sandy beach, survey examples of development related impacts and discuss the natural physical processes, environmental and infrastructure issues and development trends impacting developed barrier islands
Marine Debris in Salt Marsh	Land - Outdoor	Students collect marine debris at designated salt marsh sites using NOAA shoreline survey protocols.

Appendix C

Ocean Literacy Principles
The Earth has one big ocean with many features.
The ocean and life in the ocean shape the features of Earth.
The ocean is a major influence on weather and climate.
The ocean made the Earth habitable.
The ocean supports a great diversity of life and ecosystems.
The ocean and humans are inextricably interconnected.
The ocean is largely unexplored.