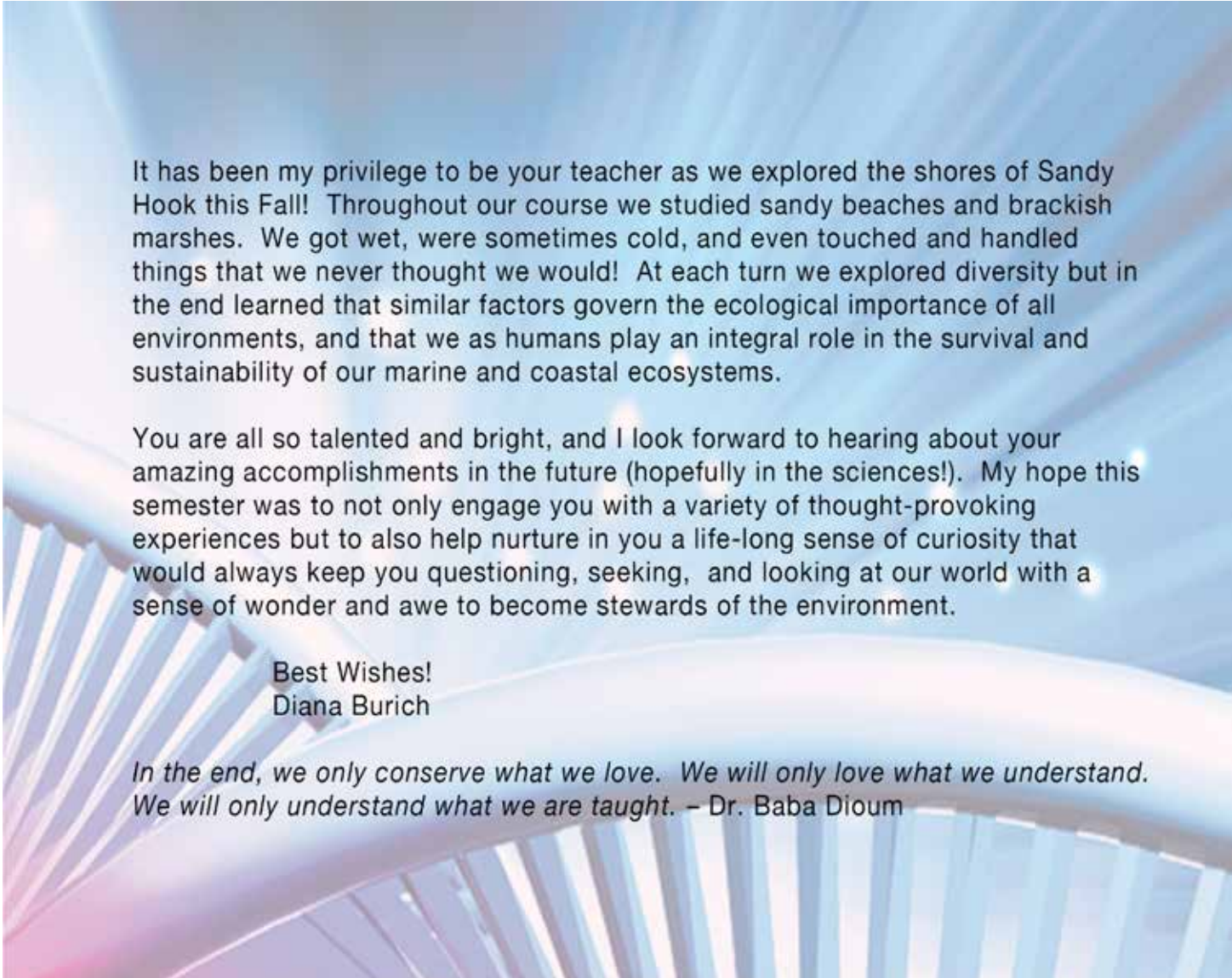




the stars
challenge

Explore Our Shore
Like Never Before
Fall 2019





It has been my privilege to be your teacher as we explored the shores of Sandy Hook this Fall! Throughout our course we studied sandy beaches and brackish marshes. We got wet, were sometimes cold, and even touched and handled things that we never thought we would! At each turn we explored diversity but in the end learned that similar factors govern the ecological importance of all environments, and that we as humans play an integral role in the survival and sustainability of our marine and coastal ecosystems.

You are all so talented and bright, and I look forward to hearing about your amazing accomplishments in the future (hopefully in the sciences!). My hope this semester was to not only engage you with a variety of thought-provoking experiences but to also help nurture in you a life-long sense of curiosity that would always keep you questioning, seeking, and looking at our world with a sense of wonder and awe to become stewards of the environment.

Best Wishes!
Diana Burich

In the end, we only conserve what we love. We will only love what we understand. We will only understand what we are taught. – Dr. Baba Dioum



Seining is a great way to examine the diversity of marine species inhabiting the nearshore areas of Sandy Hook at Horseshoe Cove.



The gang's all here! Explore the Shore Fall 2019



Students explore the health of NJ's coastal ecosystems by examining water chemistry, benthic organisms and sampling the nearshore community.





Dip nets, seine nets and chest waders enable students to go beyond dry land in their explorations.



Measuring increases and decreases in surface sand accumulation enables students to mathematically determine shoreline erosion and accretion, especially when compared to historical data.





Thanks to mild weather, students spent every Saturday in October out in field examining coastal ecosystems.



Team work gets the job done!





By examining global sand samples, students learn how geographic location and geology of an area determine sand composition.



In the clam shell investigation, students determined the frequency of predation on surf clams by moon snails. Can you guess what size clam (small, medium or large) moon snails prefer to eat?



Students learned the intricacies of interactions amongst marine organisms through a food web activity. Spider crabs served as study organisms to learn about anatomy and morphology.



Students learned about squid anatomy through dissection. Hermit crabs and mud snails were used in a design-your-own-experiment activity.



Many students learned how to graph their beach profiling data with Explore the Shore this Fall. After learning about fish, students dissected sharks to examine their external and internal makeup.





