Carrie Diaz Eaton* (ceaton@unity.edu) and Emma Perry. CORaL: Diving into Calculus. Preliminary report.

Marine Biology is increasingly relying on mathematical and computational skills for research and ecosystem management. Advances in technology such as remote sensing, unmanned submersibles, electronic tagging, and real-time monitoring have created a data rich environment. At Unity College we have recently updated the Marine Biology curriculum to focus on the pressing environmental impacts on coral reefs and their ecology. Understanding the effect of climate change on coral reef ecosystems will require a systems thinking understanding and perspective to find solutions. While mathematics has been working towards incorporating more biological examples, these example tend to serve a majority pre-med population, leaving work to be done to service the environmental professions. We explore potential intersections between our marine biology and calculus curriculum that may inform future curricular development for similar programs. (Received August 31, 2016)