Enhancing Oceanography understanding with the experiences of "Captive Oceans"

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Students in oceanography classes often request more direct exposure to actual ocean situations or field trips, etc. During regular session (13 week) or shorter term (4 week) summer classes such long trips are logistically difficult owing to numbers of students involved or timing. This new approach to such a course supplement addresses the requests by utilizing local resources and shorter field trips to those locations in which Ocean experiences are available, and are often supported through education and outreach components. The vision of the class was a mixture of classroom time, readings, along with paper and actual laboratories. In addition short day-long trips to locations where the ocean was "captured" were also used to supplement the experience. Central Virginia is a fortunate test location for such a class, with close access for "day travel" to the Chesapeake Bay and numerous field stations (NOAA, NMFS and an NSF LTER field station), museums with ocean-based exhibits (the Smithsonian and National Zoo) that address both extant and extinct Earth history, as well as national/state aquaria in Baltimore, Washington and Atlanta. Furthermore, visits to local seafood markets at local grocery stores, or larger city markets) enhanced the exposure to productivity in the ocean, and viability of the fisheries sustainability. The course could then address not only the particulars of the marine science, but also aspects of ethics (keeping animals in captivity, in situations that their life spans will be shortened, overfishing of particular species) and special difficulties that arise from these captive ocean populations. In addition, the class was encouraged to post web-based journals of experiences in order to share opinions of observations in each of the settings.