

BIO 350: Project-Based Laboratory: Marine Ecophysiology

Students will be studying the symbiotic relationship between the Aggregating Anemone, A. elegantissima, and its zooxanthellae symbionts in the genus Breviolum. More specifically, students will design experiments to elucidate how a given environmental variable (ex. light, temperature, pH, host feeding frequency) can affect this delicate symbiosis. Students will learn how to care for marine animals in saltwater aquaria, the intricacies of experimental design, lab techniques associated with measuring dependent variables of the symbiont (ex. cell density, cell size, mitotic index, chlorophyll content, and photosynthetic efficiency), statistical data analysis, and how to communicate science through a research paper.

Units: 3 Prerequisites: <u>CHEM 150</u> and IBC 200. Program: Biology