Miami Dade College

## Course Description
**OCB1010L | Introduction to Marine Biology Laboratory | 1.00 credit**
An optional laboratory class for OCB 1010. This laboratory course stresses understanding, familiarization, and identification of local marine organisms and study of local marine communities through field trips to selected local marine habitats and hands-on laboratory activities. An introduction to field collection methods and various sampling techniques is presented.

## Course Competencies
**Competency 1:** The student will demonstrate an ability to perform various sampling techniques and field collection methods by:
1. Describing the various practical field sampling techniques and laboratory examination methods.
2. Demonstrating precision in using physical and chemical data collection equipment, including, but not limited to, salinity photometer, Secchi disk, digital meters, thermometer, and Niskin bottle.
3. Demonstrating precision in the usage of specimen sampling equipment, including, but not limited to, dip nets, seine nets, plankton nets, bottom dredges, and sieves.

**Competency 2:** The student will demonstrate knowledge and comprehension of the marine organisms collected by:
1. Identifying and categorizing, by sight, the various marine organisms collected, based their respective physical and anatomical features.
2. Explaining the physiological and behavioral characteristics of the collected marine organisms in relation to their environment.

**Competency 3:** The student will demonstrate knowledge and comprehension of marine communities and ecosystems surveyed by:
1. Identifying and describing the surveyed communities and ecosystems, including, but not limited to, beaches, seagrass beds, mangroves swamps, and coral reefs.
2. Explaining and discussing factors attributing to the distribution of organisms within the communities and ecosystems surveyed.
3. Explaining the natural processes and effects of human impacts upon the communities and ecosystems surveyed.
4. Discussing various potential or active solutions to alleviate or eliminate negative human impacts on marine environments.
5. Relating personal choices and actions to large-scale human impacts on marine environments.

## Learning Outcomes:
• Use computer and emerging technologies effectively
• Solve problems using critical and creative thinking and scientific reasoning
• Formulate strategies to locate, evaluate, and apply information