

# MARINE MAMMAL FIELD STUDIES AND CONSERVATION, CERTIFICATE OF ACHIEVEMENT

**Banner Code:** 1\_CM\_MMFS

**Not Financial Aid Eligible**

The Marine Mammal Field Studies and Conservation certificate is designed to prepare students interested in gaining experiential learning in various fields of marine mammal research, public outreach, education and conservation. This introductory exposure will allow them to make important contacts and gain fundamental skills and theoretical knowledge in the field of marine mammalogy and conservation.

## Program Outcomes

1. Describe fundamentals of marine mammal ecology including evolution, adaptations to aquatic lifestyle, and threats to their environment.
2. Identify regional diversity of marine mammals in context of threats and conservation status.
3. Demonstrate various research techniques used to study marine mammals including photographic identification, biopsy sampling, and other marine mammal tracking methods.

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/certificates/#achievementtext>).

Course	Title	Units
<b>Required Courses</b>		
MRSC A180	Marine Biology	3
MRSC A187	Marine Mammals	3
MRSC A188	Marine Mammal Field Studies	1
MRSC A288	Survey of Marine Mammal Research and Techniques	1
<i>Restricted Electives (Select at least 4 units)</i>		<b>4</b>
GEOG A190	Digital Mapping: Introduction to GIS	
ITRN A392	Internship Experience - Level 1	
MARA A152	Boat Handling and Seamanship	
MRSC A124 or ESEC A124	Ecology of the Gray Whale	
MRSC A125	Field Studies in Gray Whale Ecology	
MRSC A180L	Marine Biology Lab	
MRSC A195	Marine Policy and Conservation	
MRSC A199	Special Topics in Marine Science	
MRSC A287	Introduction to Marine Mammal Rescue and Rehabilitation	
MRSC A291	Directed Study Marine Science 1	
MRSC A292	Directed Study Marine Science 2	
<b>Total Units</b>		<b>12</b>