

Framework for Designing & Conducting Effective Marine Mammal Science Courses

Marine mammal science is a vast, dynamic, and fascinating field. Integrating various aspects of marine mammal science in educational outreach can contribute to an improved understanding and support effective marine conservation.

This framework aims to inspire and guide conservation practitioners on conducting engaging educational outreach. Incorporated pedagogical principles help ensure participant engagement and achieve course objectives.

We hope this 'checklist for maximizing learning' will inspire anybody planning to talk to others about marine mammals to create engaging and effective marine mammal science courses.



Framework

Tasks

Outputs



Analyze

Who needs to understand what?

Define Audiences, Objectives, Content, Resources, and Challenges.

Prepare an **Audience Profile** including an assessment of knowledge, attitudes, and practices that need to be addressed or changed. Specify according to age groups, abilities, language, prior information, and levels of education.

Define the **Content** in a few **Key Messages** that align with what is to be learned (Objectives).

Assess the **Resources** available, such as budget allocations, locality, assistive technology or interpretation, and required permissions.

Take **Challenges**, such as weather conditions, accessibility, and social, religious, cultural, and gender issues, into consideration.



Plan

How will we organize, present and evaluate the course?

Define Organization, Structure, Timeframe, and Indicators of Success.

Consider **organizational and structural options** depending on the audience age and numbers, and availability of time and space. Incorporate **interactive elements**, and **integrate assessments** to increase and measure knowledge retention.



Develop

What tools are needed?

Create Learning Aids

Create communication tools, including visuals, appropriate for the content, structure and audience.



Implement

Ready-Set-Go!

Put Plans and Tools into Action

Collect evidence showing how well your course method and tools worked for communicating key messages and achieving course objectives.



Evaluate

How well did we do?

Analyze and Improve

Analyze effectiveness of the course method and tools, and formulate improvements for next courses.

For additional tools see:

marinemammalscience.org/professional-development/how-to-design-a-marine-mammal-science-course



The Society of Marine Mammalogy