

CAMBRIDGE IGCSE

Marine Science 0697

Syllabus Overview

Examinations 2027, 2028 and 2029

Understanding the whole syllabus

Scientific ideas become useful when they explain observations and predict what may happen in a new situation. The syllabus links factual knowledge with models, calculations and evidence. Practical skills run through the subject: measurements, variables, graphs and evaluation belong alongside the theory they help you understand.

For Marine Science 0697, the content map below follows the approved subject briefing and the official syllabus. Labels group related areas for orientation; the detailed syllabus remains the authority for individual learning requirements.

Content map

Syllabus area or component	What the area covers
Six connected marine areas	The syllabus is organised into six connected areas.
Earth, seawater and marine organisms	You will begin with the Earth and its oceans, including their formation, structure, movements and role in global systems. You will investigate the physical and chemical properties of seawater before studying the diversity, classification and adaptations of marine organisms.
Ecosystems and human influences	The course then explores how nutrients and energy move through marine environments, how organisms interact within ecosystems, and how marine populations are studied. Finally, you will examine human influences - including pollution, fishing, habitat damage, climate change, conservation and the sustainable management of marine resources.
Investigative skills	Practical work is an essential part of the course. You will develop skills in planning investigations, using equipment safely, recording observations, processing data, drawing conclusions and evaluating experimental methods.

These areas should be read as a connected course. Begin with the foundational knowledge identified in the first part of the map, then build towards the applications and explanations that depend on it. Keep definitions, diagrams, calculations and investigation skills connected. Revisit measurements and graphs while studying each topic, rather than saving practical preparation until the end. Where a row describes a choice of topics or components, study the selection required by your agreed route rather than treating all alternatives as compulsory.

Qualification and component choices

All candidates follow the component structure shown in the Assessment Overview. There is no separate Core/Extended route in this syllabus.

Both components are written examinations. Paper 2 assesses practical skills through written questions; practical learning remains part of preparation.

The assessed skills

Assessment objectives describe the abilities Cambridge looks for across the qualification. The following explanations paraphrase the syllabus objectives; they are not additional topics or separate orientation tasks.

Assessment objective	Meaning for the learner
AO1 Knowledge with understanding	Select accurate subject knowledge, terminology and examples that answer the question, and explain their meaning.
AO2 Handling information and problem-solving	Interpret the information, apply an appropriate method and explain the relationships or reasoning that support the answer.
AO3 Experimental skills and investigations	Plan and understand methods, record and interpret observations, and evaluate the quality of an investigation.

These abilities work together in an answer. Accurate knowledge supports application, while a clear explanation shows how the evidence or method leads to a conclusion. The balance varies by component, so the next lesson connects these abilities with the actual assessment formats.

Key pointers: Follow the stated examination-year syllabus, cover the required areas for your route and develop skills alongside knowledge. **Next:** Open **Assessment Overview**.