



IGCSE Marine Science

Two-year Non-Intensive Course

Course Information

Marine Science is the study of the world's oceans - their physical processes, the organisms present in them and the influences of humans on these environments.

In addition to theoretical knowledge it involves the development of the scientific skills needed for practical experimentation and ecological fieldwork.

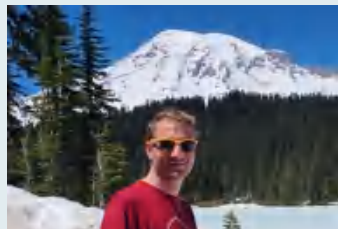
IGCSE Marine Science is ideal for those interested in the marine environment and for those who have studied Geography, Environmental Management or other sciences and want to take their studies to the next level.

Course details

Course Length:	Two-year course September 2025 - June 2026 September 2026 - May 2027
Lesson length:	50 minutes per class
Lesson time:	Mondays 2pm-2.50pm (UK time)
Start date:	Monday September 8 th , 2025
Course price:	£25/month (£250 for year one) (£225 for year two)
Class size:	Maximum 12 students
Exam board:	Cambridge
Course code:	0697
Assessment:	Two x 1hr 45min papers: Paper one: Theory and Data Handling Paper two: Theory and Practical skills

Your tutor

- I'm Damian and I teach all the classes at Earthlings Learning.
- I began my career in education teaching English as a foreign language, where I taught students of all ages and abilities for ten years in various different countries in Asia and Europe.
- I decided to pursue my life-long interest in the environment by completing an MSc in Environmental Management in 2018 and started off Earthlings in 2021 to help bring this knowledge and enthusiasm to other people who want to learn about it.
- I'm an amateur ecologist and general nature nerd, investigating ecosystems and human societies whenever I can!
- I enjoy all sorts of weird and wacky natural things and host classes with an informed but informal enthusiastic style. I like to travel to see some of the things we talk about in class first-hand and bring these experiences to the classroom.



General Course Information

- This two-year course is complete programme for students to sit the IGCSE Geography exam but is also suitable for those just wanting to learn more about the planet or widen their knowledge at a slower pace than an intensive course of study.
- Homework is given every other lesson. While homework is not mandatory but it's really important for consolidating knowledge and helping me assess progress. Failure to complete homework may result in a lower grade.
- There are a range of partial and full mock exams throughout the course, with work on exam skills including work with graphs and answering essay-style questions
- Participation is optional. Students may engage as little or as much as they are comfortable with. Engagement with groupworking tasks is excellent practice, and engagement from students helps me with the class dynamic but it is at all times optional. Practical research skills, and skills like graph and diagram drawing will be demonstrated
- Special Education Needs are more than welcome! We're all different and have different learning styles. Having ADHD myself I understand some of the challenges this can create!
- **CONTENT WARNING** - As a GCSE this course is designed for students aged 14 and over. Younger students are welcome but should be aware of some mature content in this course. We will look at the lifestyles of marine organisms which includes their deaths. Studying fishing and marine pollution involves the mortality of marine organisms which may affect more sensitive students.

Modules of study - unit breakdown

Unit 1: The Earth and its oceans	The structure of the Earth include tectonic plates and a study of how tides and currents govern the ocean
Unit 2: Seawater	We all know what sea water is, but how does it actually work? We look at the effects of pH, salinity and density to understand just how this influences the ocean
Unit 3: Marine organisms	Welcome to the biology section! Here we look at the structure of cells, reproduction, the features of organisms and their taxonomy (naming conventions)
Unit 4: Nutrients and energy	In this module we go deeper into what makes marine organisms tick - photosynthesis, energy and its flow through ecosystems.
Unit 5: Marine Ecosystems	A budding marine ecologist's paradise. The functioning of marine ecosystems and the specifics of this manifests in particular marine ecosystems.
Unit 6: Human influences on the marine environment	Where are humans in all of this? An analysis of human impacts and dependencies on the marine environment including fisheries, fish farming, energy and the impacts of climate change.


Practical requirements

- Experimental and fieldwork skills are an essential part of the assessment of this syllabus and as a tutor I must sign-off that you've been given the opportunity to conduct these activities.
- Activities include lab-style experimentation, making models and conducting on-site fieldwork in coastal environments.
- Most require very limited equipment and can be completed using household items but some purchasing of materials and equipment will be required.
- As this is a distance course, experiments will be demonstrated during class time and support given if you would like to conduct them at home.
- Class time will be given for risk assessment and data analysis/presentation
- While it is possible to achieve this theoretically when experiments are not possible parents are strongly advised to facilitate this to allow students to have the best chance of passing the exam.

Fieldwork

- To give students a chance to practice coastal fieldwork skills an in-person fieldtrip will be conducted during the course.
- The exact details are TBC and depend on student attendance but the principle is to conduct a one-day, in-person fieldtrip in Plymouth, UK.
- During this fieldtrip students will be given the opportunity to practice identification of coastal species, investigations into species distribution and richness and measuring the abiotic conditions of rocky shores.
- No additional cost will be made for this course however students will be need to be accompanied by a responsible adult for risk assessment purposes.
- This will be the first marine science fieldtrip so a certain amount of negotiating with parents will be necessary to make it happen!

Further information

Required skills	<p>This IGCSE requires an interest in the marine environment and a desire to understand how it works. Previous studies in Environmental Management, Geography, Biology or other sciences are highly recommended as entry requirements to this course but aren't absolutely necessary. Good literacy skills and basic scientific and mathematical abilities are exceedingly valuable</p>	
Required equipment	<ul style="list-style-type: none">• Students require a device to join Zoom meetings. A microphone and camera is an advantage when participating and for completing formal mock exams.• All students must have a way of submitting completed homework. Full guidance on formatting and submitting homework can be found in the “Homework guidance” doc.<ul style="list-style-type: none">• A printer is needed when not completing exams and homework digitally.• <i>Various equipment will be needed to conduct experiments and fieldwork in home settings</i>	
Textbooks used	<p>There is one required textbook for this course:</p> <p>Cambridge IGCSE™ Marine Science Coursebook With Digital Access (2 Years) - ISBN: 9781009089760)</p>	
Additional study	<ul style="list-style-type: none">• Attending lessons and completing homework is sufficient to pass the course however approximately one hour's additional study per week is advised.• Additional study, including reading, watching documentaries and note-taking is extremely important for retaining knowledge and attaining higher grades.• Any opportunity to visit coastal areas environments can be invaluable in connecting learning to real-world processes and features.• Completing practical investigations at home will help develop understanding of theories and develop the skills needed for taking the exam.	
How parents can help	<ul style="list-style-type: none">• Please be ready to encourage your child to keep ordered notes and files.• Encouraging students to explain processes and theories to you can be helpful.• Marine science focussed heavily on understanding of coastal and coastal communities so any trip to the seaside can be extremely helpful!	