

MARINE BIOLOGY

FACULTY OF SCIENCE



Marine biology is the study of life in the sea in all its aspects. The world's oceans cover 70% of the surface of the planet and have an average depth of almost 4 km, thus providing more than 95% of all the 'living space' on earth. They are also the most poorly known of all environments, making marine biology a pioneering science in which new discoveries are frequently made. Cape Town is one of the best locations in the world to study marine biology, as it is situated near three of the world's major oceans: the Atlantic, Indian and Southern. UCT has a long and proud history as a centre of research and education in marine studies.



Students taking this major will learn about marine life in all its forms, from viruses to whales, and about the structure and function of various marine ecosystems, ranging from coral reefs to polar seas and from estuaries to the abyssal depths, with a focus on southern Africa. The third-year courses address management and conservation of marine resources. In addition to formal lectures and assignments, the various courses making up this major have field trips, tutorials and practical sessions that introduce students to experimental and analytical methods used by professional marine scientists.



WHO WOULD BE INTERESTED IN THIS MAJOR?
Any student interested in life in the sea and in the sustainable management of human activities in the sea would find this major of interest. The major is suited to students interested in a career in marine biology, fisheries science and marine conservation.



WHAT COURSES WILL YOU TAKE?

The compulsory courses listed below must be included in your selection of courses for a major in Marine Biology. Students are encouraged to take co-majors in either Ocean and Atmosphere Science, Biology, Biochemistry, Genetics, Quantitative Biology or Environmental and Geographical Science.



1ST YEAR LEVEL COURSES

- Cell Biology (BIO1000)
- Biological Diversity (BIO1004)
- Chemistry (CEM1000)
- Mathematics (MAM1004)
- Introductory Statistics for Scientists (STA1007)

2ND YEAR LEVEL COURSES

- Principles of Oceanography (SEA2004)
- Principles of Ecology & Evolution (BIO2014)

At least one of the following three courses:

- Vertebrate Diversity & Functional Biology (BIO2015)
- Invertebrate Diversity & Functional Biology (BIO2016)
- Plant Diversity & Functional Biology (BIO2017)

3RD YEAR LEVEL COURSES

- Marine Ecosystems (BIO3002)
- Marine Resources (BIO3017)

CAREER OPPORTUNITIES FOR GRADUATES

Students graduating with a BSc degree with a major in Marine Biology are well placed to study further at postgraduate level in either Marine Biology or similar disciplines, either in South Africa or elsewhere. There are career opportunities in private consulting firms, marine fisheries and aquaculture companies; in research establishments such as the Council for Scientific and Industrial Research (CSIR); in the government Departments of Agriculture, Forestry and Fisheries and of Environmental Affairs; in conservation agencies; in natural history museums; in the education sector; in various forms of media and tourism; and many more.

MINIMUM ADMISSION AND SUBJECT REQUIREMENTS *(See table overleaf)*

FPS of 550

Mathematics 70% & Physical Science 60%

NBT in Mathematics, AL & QL to be written