

COURSE SPECIFICATION

BSc (Hons) Marine Environmental Science

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Please refer to the Course Specification Guidance Notes for guidance on completing this document.

Course Title	BSc (Hons) Marine Environmental Science
Final Award	BSc (Hons)
Exit Awards	CertHE, DipHE, BSc, BSc (Hons)
Course Code / UCAS code (if applicable)	C0594S
Mode of study	Full time
Mode of delivery	Campus
Normal length of course	3 years, 4 years with placement
Cohort(s) to which this course specification applies	From September 2023 intake onwards
Awarding Body	University of Portsmouth
Teaching Institution	University of Portsmouth
Faculty	Faculty of Science & Health
School/Department/Subject Group	School of the Environment and Life Sciences
School/Department/Subject Group webpage	School of the Environment and Life Sciences University of Portsmouth
Course webpage including entry criteria	<u>http://www.port.ac.uk/courses/geography-earth-and-</u> <u>environmental-sciences/bsc-hons-marine-environmental-</u> <u>science/</u> <u>https://www.port.ac.uk/study/courses/undergraduate/bs</u> <u>c-hons-marine-environmental-science</u>
Professional and/or Statutory Regulatory Body accreditations	Institution of Environmental Sciences
Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level	4 - 6

This course specification provides a summary of the main features of the course, identifies the aims and learning outcomes of the course, the teaching, learning and assessment methods used by teaching staff, and the reference points used to inform the curriculum.

This information is therefore useful to potential students to help them choose the right course of study, to current students on the course and to staff teaching and administering the course.

Further detailed information on the individual modules within the course may be found in the relevant module descriptors and the Course Handbook provided to students on enrolment.

Please refer to the <u>Course and Module Catalogue</u> for further information on the course structure and modules.

Educational aims of the course

The BSc (Hons) Marine Environmental Science course is designed to offer an integrated approach to the scientific study and analysis of the marine environment, backed-up with a good awareness of current marine environmental issues and concerns. The course aims to provide a stimulating learning environment to enable students develop a range of academic and generic skills to help them find good quality employment on graduation, and provide the basis for a lifetime of learning. The course embraces the integrated nature of marine environmental science, drawing on marine biology, oceanography, chemistry, physics and geology to allow students to interpret the pressures on our marine environment and point to ways in which we can act to manage these. Elements of the course can be chosen so as to follow either a broad or focused range of topics, including energy resources, environmental pollution and waste management and climate change. There is the opportunity to specialise and numerous opportunities for fieldwork. In the final-year dissertation, students are able to choose their own area in which to conduct a substantial environmental investigation to produce a report to a professional standard. The course aims to equip students to work as marine environmental scientists or within alternative employment. In general, the course aims to: Develop knowledge of the variety of strategies needed to work in the field of marine environmental science. Train marine environmental scientists with a specialist knowledge of a specific aspect of environmental science, such as marine ecology, marine environmental chemistry or marine conservation. In addition, and more specifically, the course aims to: Provide a stimulating, wide ranging, yet integrated programme in the marine environmental sciences. Develop a range of key skills through opportunities provided in the study modules, including critical, analytical, practical, professional, research and communication skills, to prepare students for postgraduate study and/or professional qualifications. Provide a challenging, stimulating and self-rewarding study environment. Provide a framework whereby individual study paths may be forged based on choice from a range of options. Accommodate student needs in relation to maximising their career potential by enabling them to develop knowledge, understanding and skills in their chosen subject area. Train students in a professional manner such that it will enhance their employability prospects and help them towards a satisfying career in environmental science. Develop the skills necessary for life-long independent learning and acquisition of knowledge.

Course Learning Outcomes and Learning, Teaching and Assessment Strategies

The <u>Quality Assurance Agency for Higher Education (QAA)</u> sets out a national framework of qualification levels, and the associated standards of achievement are found in their <u>Framework for Higher Education</u> <u>Qualifications</u> document.

The Course Learning Outcomes for this course are outlined in the tables below.

LO	Learning outcome	Learning and Teaching	Assessment
number		methods	methods
A1	The need for a multidisciplinary and interdisciplinary approach to acquire and advance knowledge and understanding of the Earth's environmental systems, particularly the marine environment.	Through the Global Environmental Challenges and Introduction to Marine Ecology and Oceanography at level 4 and many other modules at levels 5 and 6, including Oceanography, Marine Organisms & Ecosystems and Marine Ecology & Conservation.	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.
A2	The processes that shape the marine environment at different temporal	Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11 Developed through the Planet Earth, Global	Literature reviews, portfolio, reports, oral
	and spatial scales and their influence on and by human activities. The human causes and consequences of environmental impacts, and solutions and controls of impacts.	Environmental Challenges, Introduction to Marine Ecology, and Oceanography, Ecology, Plant and Human Impact, Marine Organisms and Ecosystems, and Marine Ecology and Conservation modules.	presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and dissertation thesis.
		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
A3	The methods of observing, acquiring, interpreting and analysing marine environmental information, with a critical understanding of the appropriate contexts for their values and use. The terminology, nomenclature and classification approaches drawn from the natural and social sciences, and developed within each individual discipline.	Delivered by a range of modules covering mathematics and computing, including Analysis of the Earth & Environment, Geographical Information Systems and Remote Sensing, Environmental Fieldwork and Professional Skills, Environmental Chemistry and Monitoring, Scientific and Technical Diving Techniques, Climate Change, and EnvironmentalAssessment	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.

		through a variety of fieldtrips and the final year Dissertation module. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
A4	The issues concerning the finite re- use, availability and sustainability of resources.	Developed through the Global Environmental Challenges module leading to other modules such as Energy Resources & the Science of Zero Carbon and Conservation Biogeography. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.
A5	The major Earth systems involved in the cycling of energy, water and matter, and the complexity and inter-relatedness of them.	Developed in the Planet Earth, Global Environmental Challenges and Introduction to Marine Ecology and Oceanography modules and further explored in a number of other modules at later stages, including Environmental Chemistry & Monitoring, Oceanography and Climate Change Hallmarks 1,2,3,4,5,6,7,8,9,10 and	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.

LO	Learning outcome	Learning and Teaching	Assessment
number		methods	methods
B1	Plan, conduct and report on a	Specifically developed	Literature reviews,
	programme of original research at	during Research,	portfolio, reports, oral
	undergraduate level including the	Fieldwork and	presentations, poster
	formulation and testing of	Professional Skills and	presentations, field
	hypotheses.	the final year	notebooks, fieldwork
		Dissertation.	reports, laboratory reports and exams.
		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
B2	Critically consider, select and apply	Developed through a	Literature reviews,
	appropriate mathematical, scientific,	range of modules	portfolio, reports, oral
	laboratory and computer-based methods and principles in the analysis and solution of marine environmental problems.	including Analysis of the Earth & Environment , Oceanography, , Environmental Chemistry &	presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.
		Monitoring,	
		Geographical	
		Information Systems &	
		Remote Sensing,	
		Climate Change and	
		Dissertation	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and	
		11	
B3	Be creative and innovative in the	Developed through	Literature reviews,
	analysis and solution of marine	many modules,	portfolio, reports, oral
	environmental science problems, and	including Global	presentations, poster
	contribute to topical debate on	Environmental	presentations, field
	marine environmental issues and use	Challenges, Climate	notebooks, fieldwork
	specialist knowledge to propagate	Change, Environmental	reports, laboratory
	informed views.	Pollution & Waste	reports and exams.
		Management, Energy	
		Resources & the	
		Science of Zero Carbon,	
		Marine Ecology &	
		Conservation as well as	
		the final year	
		Dissertation.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and	
		11	
B4	Work with confidence from basic	Primarily developed	Literature reviews,
	principles to apply essential marine	through the Research,	portfolio, reports, oral
	environmental science techniques to	Fieldwork and	presentations, poster
	unfamiliar situations.	Professional Skills,	presentations, field
		Environmental	notebooks, fieldwork

		Chemistry & Monitoring, Oceanography, Marine Organisms & Ecosystems, and Climate Change. Other modules, including the final year Dissertation also contribute to achieving this learning outcome. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	reports, laboratory reports and exams.
B5	Estimate and scope the scale of marine environmental problems and their potential consequences. Integrate and evaluate relevant information from a variety of sources and recognise legal, moral, ethical and other social issues.	Developed through most modules, including Global Environmental Challenges, Introduction to Marine Ecology & Oceanography, Oceanography, Marine Ecology & Conservation andClimate Change. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.

LO	Learning outcome	Learning and Teaching methods	Assessment
number		Learning and reaching methods	methods
C1	Plan, conduct and report on scientific investigations, including the use of secondary data.	Laboratory classes involving all aspects of C1-C3 are a feature of many modules within the course. C1-C3 are particularly stressed in Environmental Chemistry & Monitoring, Oceanography, Research, Fieldwork and Professional Skills, Marine Organisms & Ecosystems, Environmental Assessment & Management, Analytical Methods for Earth & Environmental Sciences and the final year Dissertation. Hallmarks 1,2,3,4,5,6,7,8,9,10	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.
		and 11	
C2	2 Collect, record and analyse data using appropriate techniques in the field and laboratory.	Outlined above.	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and Dissertation thesis.
C3	Undertake field and laboratory investigations in a responsible and safe manner, paying due attention to risk assessment, rights of access, relevant health and safety regulations, and sensitivity to the impact of investigations on the environment and stakeholders.	Outlined above.	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports and Dissertation thesis.
C4	Reference work in an appropriate manner.	Developed in all modules, particularly where modules are assessed by fully referenced reports or presentations. Students are encouraged to critically read and cite primary literature and are taught and required to use the prescribed APA format. Specific examples of such modules are Global Environmental Challenges, Introduction to Marine Ecology and Oceanography, Oceanography, Energy Resources, as well as the final	Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.

		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
C5	Identify and work towards targets for personal, academic and career development. Develop an adaptable approach to study / work and develop the skills necessary for self-managed and lifelong learning.	C5-C7 are stressed explicitly within the tutorial system (particularly at levels 5 and 6), and in the Research, Fieldwork and Professional Skills and Dissertation modules, as well as a number of other modules where site visits and guest speakers provide students with experience and understanding of the workplace, such as Oceanography, Marine Organisms & Ecosystems, Environmental Pollution, & Waste Management, Environmental Chemistry & Monitoring and Energy Resources & the Science of Zero Carbon. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Careers portfolio, mock graduate recruitment assessment, mock job application, CV and job interview.

LO Learning outcome Learning and Teaching			Assessment
number		methods	methods
D1	Communicate appropriately to a	Developed in the tutorial	Literature reviews,
	variety of audiences in written,	programme and a number	portfolio, reports, oral
	verbal and graphical forms, using	of modules where students	presentations, poster
	information from a variety of	are required to undertake	presentations, field
	sources.	group discussions, and give	notebooks, fieldwork
		oral and poster	reports, laboratory
		presentations to staff and	reports, exams and
		their peer group, including	Dissertation thesis.
		Global Environmental	
		Challenges, Environmental	
		Chemistry & Monitoring,	
		Oceanography, Research,	
		Fieldwork & Professional	
		Skills, Marine Organisms &	
		Ecosystems and the final	
		year Dissertation module. In	
		some modules, external	
		visitors may also be present	
		at the presentations.	
		Written communication	
		skills are developed in all	
		modules.	
		Hallmarks	
		1,2,3,4,5,6,7,8,9,10 and 11	
D2	Appreciate issues of sample	Addressed in a number of	Field notebooks,
	selection, accuracy, precision and	modules where laboratory	fieldwork reports,
	uncertainty during collection,	or fieldwork is undertaken.	laboratory reports,
	recording and analysis of data in	The concept of sample,	poster presentation and
	the field and laboratory.	accuracy, precision and	Dissertation thesis.
		uncertainty during	
		collection, recording and	
		analysis of data is	
		introduced in Introduction	
		to Marine Ecology and	
		Oceanography, Quantitative	
		Methods, and Ecology, Plant	
		and Human Impact	
		and is further developed in	
		modules such as	
		Oceanography,	
		Environmental Chemistry &	
		Monitoring, Environmental	
		Fieldwork & Professional	
		Skills, Oceanography,	
		Marine Organisms &	
		Ecosystems, Analytical	
		Methods for Earth &	
		Environmental Sciences and	
		the final year Dissertation.	

		Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	
D3	Use the Internet critically and professionally as a means of communication and a source of information.	Addressed in modules such as Quantitative Methods, Introduction to Marine Ecology and Oceanography and Global Environmental Challenges, and reinforced throughout the tutorial programme. Students are encouraged to critically assess the use of the internet as a source of information throughout the entire course, particularly when researching and preparing coursework. Group work plays an important role in many modules.	Literature reviews, portfolio, reports, oral presentations, poster presentations, notebooks, fieldwork reports, laboratory reports and exams.
D4	Identify individual and collective goals / responsibilities and perform in a manner appropriate to these roles. Also recognise and respect the views of others and evaluate performances as an individual and a team member.	1,2,3,4,5,6,7,8,9,10 and 11 Addressed in a number of modules, including Global Environmental Challenges, Ecology, Plants & Human Impact, Environmental Chemistry & Monitoring, Research, Fieldwork and Professional Skills, the Climate Change modules. In addition, the tutorial programme is used to examine Belbin's theory on group formation and dynamics and students take part in group analysis and role play exercises. Students also engage in analysis and evaluation of their team and individual roles throughout the course, through peer- review and self-assessment exercises in a number of modules. Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	Group fieldwork. Group work and individual oral presentations, posters and written assessments.
D5	Solve numerical problems using both computer and non-computer based techniques.	Specifically addressed in modules such as Analysis of the Earth & Environment,	Reports, oral presentations, poster presentations,

Science for Earth Systems, Geographical Information Systems and Remote Sensing, Oceanography, Environmental Auditing and Assessment, and Climate Change modules, amongst others.	notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.
Hallmarks 1,2,3,4,5,6,7,8,9,10 and 11	

Academic Regulations

The current University of Portsmouth <u>Academic Regulations: Examination & Assessment Regulations</u> will apply to this course.

Support for Student Learning

The University of Portsmouth provides a comprehensive range of support services for students throughout their course, details of which are available at the <u>MyPort</u> student portal.

In addition to these University support services, this course also provides support prior to, during and following work-based learning and/or placements (including study abroad). Support includes personal tutors, supervisors and mentors as appropriate. Students will have access to all their usual learning resources while off-campus including course details and handbooks, as well as a range of placement-specific resources and/or handbooks.

Evaluation and Enhancement of Standards and Quality in Learning and Teaching

The University of Portsmouth undertakes comprehensive monitoring, review and evaluation of courses within clearly assigned staff responsibilities. Student feedback is a key feature in these evaluations, as represented in our <u>Policy for Listening to and Responding to the Student Voice</u> where you can also find further information.

Reference Points

The course and outcomes have been developed taking account of:

- University of Portsmouth Curriculum Framework Specification
- University of Portsmouth Strategy 2025
- University of Portsmouth Code of Practice for Work-based and Placement Learning
- Quality Assurance Agency UK Quality Code for Higher Education
- Quality Assurance Agency Qualification Characteristic Statements
- <u>Quality Assurance Agency Subject Benchmark Statement</u> for Earth Sciences, Environmental Sciences and Environmental Studies, October 2014
- Quality Assurance Agency Framework for Higher Education Qualifications
- Requirements of Professional and/or Statutory Regulatory Bodies: Institution of Environmental Sciences (IES)

- Vocational and professional experience, scholarship and research expertise of the University of Portsmouth's academic members of staff
- National Occupational Standards

Changes to your course/modules

The University of Portsmouth has checked the information provided in this Course Specification and will endeavour to deliver this course in keeping with this Course Specification. However, changes to the course may sometimes be required arising from annual monitoring, student feedback, and the review and update of modules and courses.

Where this activity leads to significant changes to modules and courses there will be prior consultation with students and others, wherever possible, and the University of Portsmouth will take all reasonable steps to minimise disruption to students.

It is also possible that the University of Portsmouth may not be able to offer a module or course for reasons outside of its control, for example, due to the absence of a member of staff or low student registration numbers. Where this is the case, the University of Portsmouth will endeavour to inform applicants and students as soon as possible, and where appropriate, will facilitate the transfer of affected students to another suitable course.

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