



UNIVERSITY OF  
PORTSMOUTH

## COURSE SPECIFICATION

### *BSc (Hons) Marine Environmental Science*

Academic Standards, Quality and Partnerships  
Department of Student and Academic Administration

July 2021

#### Copyright

The contents of this document are the copyright of the University of Portsmouth and all rights are reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, such as electronic, mechanical, photocopied, recorded or otherwise, without the prior consent of the University of Portsmouth.

Course specification for *BSc (Hons) Marine Environmental Science*

# COURSE SPECIFICATION

Please refer to the [Course Specification Guidance Notes](#) for guidance on completing this document.

|   |   |
|---|---|
| <b>Course Title</b>   | <b><i>BSc (Hons) Marine Environmental Science</i></b>   |
| Final Award   | <i>BSc (Hons)</i>   |
| Exit Awards   | <i>CertHE, DipHE, BSc, BSc (Hons)</i>   |
| Course Code / UCAS code (if applicable)   | U0594PYC  |
| Mode of study   | <i>Full time</i>  |
| Mode of delivery  | <i>Campus</i>   |
| Normal length of course   | <i>3 years, 4 years with placement</i>  |
| Cohort(s) to which this course specification applies  | <i>From September 2022 intake onwards</i>   |
| Awarding Body   | <i>University of Portsmouth</i>   |
| Teaching Institution  | <i>University of Portsmouth</i>   |
| Faculty   | <i>Faculty of Science &amp; Health</i>  |
| School/Department/Subject Group   | <i>School of the Environment, Geography &amp; Geosciences</i>   |
| School/Department/Subject Group webpage   | <a href="https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-science-and-health/school-of-the-environment-geography-and-geosciences">https://www.port.ac.uk/about-us/structure-and-governance/organisational-structure/our-academic-structure/faculty-of-science-and-health/school-of-the-environment-geography-and-geosciences</a> |
| Course webpage including entry criteria   | <a href="http://www.port.ac.uk/courses/geography-earth-and-environmental-sciences/bsc-hons-marine-environmental-science/">http://www.port.ac.uk/courses/geography-earth-and-environmental-sciences/bsc-hons-marine-environmental-science/</a>   |
| Professional and/or Statutory Regulatory Body accreditations  | Institution of Environmental Sciences   |
| <a href="#">Quality Assurance Agency Framework for Higher Education Qualifications (FHEQ) Level</a> | 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 [Course and Module Catalogue](#) 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 [Quality Assurance Agency for Higher Education \(QAA\)](#) sets out a national framework of qualification levels, and the associated standards of achievement are found in their [Framework for Higher Education Qualifications document](#).

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

### A. Knowledge and understanding of:

| LO number | Learning outcome  | Learning and Teaching methods  | Assessment 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 and Marine Organisms & Ecosystems.<br><br>Hallmarks<br>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, exams |

Course specification for *BSc (Hons) Marine Environmental Science*

|    |  |   |  |
|----|--|---|--|
|    |  |   | and Dissertation thesis.   |
| A2 | The processes that shape the marine environment at different temporal 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.  | Developed through the Planet Earth, Global Environmental Challenges, Introduction to Marine Ecology, and Oceanography, Ecology, Plant and Human Impact, Marine Organisms and Ecosystems, and Marine Ecology and Conservation modules.<br><br>Hallmarks<br>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, exams and dissertation thesis. |
| 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 Quantitative Methods, Geographical Information Systems and Remote Sensing, Environmental Fieldwork and Professional Skills, Environmental Chemistry and Monitoring, Scientific and Technical Diving Techniques, Climate Change, and Environmental Auditing and Assessment, as well as through a variety of fieldtrips and the final year Dissertation module.<br><br>Hallmarks<br>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.                      |
| 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 and Conservation Biogeography.<br><br>Hallmarks<br>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<br><br>Hallmarks<br>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. |
|----|--|---|---|

Add additional rows as required.

**B. Cognitive (Intellectual or Thinking) skills, able to:**

| LO number | Learning outcome  | Learning and Teaching methods   | Assessment methods  |
|-----------|---|---|---|
| B1        | Plan, conduct and report on a programme of original research at undergraduate level including the formulation and testing of hypotheses.  | Specifically developed during Research, Fieldwork and Professional Skills and the final year Dissertation.<br><br>Hallmarks<br>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. |
| B2        | Critically consider, select and apply appropriate mathematical, scientific, laboratory and computer-based methods and principles in the analysis and solution of marine environmental problems. | Developed through a range of modules including Quantitative Methods, Oceanography, , Environmental Chemistry & Monitoring, Geographical Information Systems & Remote Sensing, Climate Change and Dissertation<br><br>Hallmarks<br>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. |
| B3        | Be creative and innovative in the analysis and solution of marine environmental science problems, and contribute to topical debate on marine environmental issues and use                       | Developed through many modules, including Global Environmental Challenges, Climate Change, Environmental Pollution &  | Literature reviews, portfolio, reports, oral presentations,   |

Course specification for *BSc (Hons) Marine Environmental Science*

|    |  |  |   |
|----|--|--|---|
|    | specialist knowledge to propagate informed views.  | Waste Management, Energy Resources, Marine Ecology & Conservation as well as the final year Dissertation.<br><br>Hallmarks<br>1,2,3,4,5,6,7,8,9,10 and 11  | poster presentations, field notebooks, fieldwork reports, laboratory reports and exams.   |
| B4 | Work with confidence from basic principles to apply essential marine environmental science techniques to unfamiliar situations.  | Primarily developed through the Research, Fieldwork and Professional Skills, Environmental Chemistry & Monitoring, Oceanography, Marine Organisms & Ecosystems, and Climate Change. Other modules, including the final year Dissertation also contribute to achieving this learning outcome.<br><br>Hallmarks<br>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. |
| 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 and Climate Change.<br><br>Hallmarks<br>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. |

Add additional rows as required.

**C. Practical (Professional or Subject) skills, able to:**

| LO number | Learning outcome  | Learning and Teaching methods  | Assessment 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 | Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork |

Course specification for *BSc (Hons) Marine Environmental Science*

|    |   |  |  |
|----|---|--|--|
|    |   | Skills, Marine Organisms & Ecosystems, Environmental Auditing and Assessment, and the final year Dissertation.<br><br>Hallmarks<br>1,2,3,4,5,6,7,8,9,10 and 11   | reports, laboratory reports, exams and Dissertation thesis.  |
| 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, | Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis. |

|    |   |   |  |
|----|---|---|--|
|    |   | Oceanography, Energy Resources, as well as the final Dissertation modules.<br><br>Hallmarks<br>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.<br><br>Hallmarks<br>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. |

Add additional rows as required.

**D. Transferrable (Graduate and Employability) skills, able to:**

| LO number | Learning outcome   | Learning and Teaching methods   | Assessment methods   |
|-----------|--|---|--|
| D1        | Communicate appropriately to a variety of audiences in written, verbal and graphical forms, using information from a variety of sources. | Developed in the tutorial programme and a number of modules where students are required to undertake group discussions, and give oral and poster presentations to staff and their peer group, including Global Environmental Challenges, Environmental Chemistry & Monitoring, Oceanography, Research, Fieldwork & Professional Skills, Marine Organisms & Ecosystems and the final year Dissertation | Literature reviews, portfolio, reports, oral presentations, poster presentations, field notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis. |

Course specification for *BSc (Hons) Marine Environmental Science*

|    |  |  |   |
|----|--|--|---|
|    |  | <p>module. In some modules, external visitors may also be present at the presentations. Written communication skills are developed in all modules.</p> <p>Hallmarks<br/>1,2,3,4,5,6,7,8,9,10 and 11</p>  |   |
| D2 | <p>Appreciate issues of sample selection, accuracy, precision and uncertainty during collection, recording and analysis of data in the field and laboratory.</p> | <p>Addressed in a number of modules where laboratory or fieldwork is undertaken. The concept of sample, accuracy, precision and 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 &amp; Monitoring, Environmental Fieldwork &amp; Professional Skills, Oceanography, Marine Organisms &amp; Ecosystems and the final year Dissertation.</p> <p>Hallmarks<br/>1,2,3,4,5,6,7,8,9,10 and 11</p> | <p>Field notebooks, fieldwork reports, laboratory reports, poster presentation and Dissertation thesis.</p>                       |
| D3 | <p>Use the Internet critically and professionally as a means of communication and a source of information.</p>   | <p>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</p>  | <p>Literature reviews, portfolio, reports, oral presentations, poster presentations, notebooks, fieldwork reports, laboratory</p> |

|    |   |  |  |
|----|---|--|--|
|    |   | <p>of information throughout the entire course, particularly when researching and preparing coursework. Group work plays an important role in many modules.</p> <p>Hallmarks<br/>1,2,3,4,5,6,7,8,9,10 and 11</p>   | <p>reports and exams.</p>  |
| D4 | <p>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.</p> | <p>Addressed in a number of modules, including Global Environmental Challenges, Environmental Chemistry &amp; 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.</p> <p>Hallmarks<br/>1,2,3,4,5,6,7,8,9,10 and 11</p> | <p>Group fieldwork. Group work and individual oral presentations, posters and written assessments.</p>                                     |
| D5 | <p>Solve numerical problems using both computer and non-computer based techniques.</p>  | <p>Specifically addressed in modules such as Quantitative Methods, Science for Earth Systems, Geographical Information Systems and Remote Sensing, Oceanography, Environmental Auditing and Assessment, and Climate Change modules, amongst others.</p>  | <p>Reports, oral presentations, poster presentations, notebooks, fieldwork reports, laboratory reports, exams and Dissertation thesis.</p> |

|  |  |   |  |
|--|--|---|--|
|  |  | Hallmarks<br>1,2,3,4,5,6,7,8,9,10 and<br>11 |  |
|--|--|---|--|

*Add additional rows as required.*

## Academic Regulations

The current University of Portsmouth [Academic Regulations](#) 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 [MyPort](#) 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 [Policy for Listening to and Responding to the Student Voice](#) where you can also find further information.

## Reference Points

The course and outcomes have been developed taking account of:

*Insert additional reference points or delete as required*

- [University of Portsmouth Curriculum Framework Specification](#)
- [University of Portsmouth Vision 2030 and 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](#)
- [Quality Assurance Agency Subject Benchmark Statement](#) 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

## Disclaimer

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.

## Copyright

The contents of this Course Specification are the copyright of the University of Portsmouth and all rights are reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, such as electronic, mechanical, photocopied, recorded or otherwise, without the prior consent of the University of Portsmouth.

## Document details

|                                       |  |
|---------------------------------------|--|
| Author                                | <i>Michelle Bloor – update by Sarah Reynolds</i>                       |
| Date of production and version number | <i>[28th June 2018] [Version number 1]</i>                             |
| Date of update and version number     | <i>[6<sup>th</sup> July 2019] [2]<br/>7th Sept 2021 (SR) Version 3</i> |
| Minimum student registration numbers  | <i>15</i>  |