10 Programme Aims

1. To provide students with an excellent undergraduate academic record with an advanced knowledge and understanding in marine environmental research.
2. To enable students to learn about the roles of science, policy, technology and economic development in the marine environment.
3. To enable students to gain a very multidisciplinary understanding of marine environmental issues, their origins and possible solutions.
4. To offer a means of entry into a research career in marine environmental science through involvement in the planning and conduct of an original investigation.

11 Learning Outcomes
The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

Knowledge and Understanding

On completing the programme students will have gained:

A1. Understanding of the principal natural and anthropogenic processes maintaining and altering structure, function and ecosystem services of coastal waters.
A2. Insight into the key concepts and methodologies used in ecosystem, environmental management and conservation science.
A3. Understanding of theory, principles, concepts and practises in marine governance, including potential conflicts among stakeholders and roles of integrated management in sustainable use of coastal resources.
A4. Detailed knowledge of a selected research topic in marine natural and/or social environmental science as an independent investigator.
A5. Knowledge of the strengths and weaknesses of different research methodologies and approaches within a specific discipline.

Teaching and Learning Methods

A1 will be derived from seminars and a project paper on the selected topics. Seminars and student learning from these and related practical exercises will provide the learning for A2, while understanding of A3 will come from seminars and a Report. A4 and A5 will be learnt from seminars and an essay, and supervisions together with the proposal, subject review, paper and other assessments.
### Assessment Strategy

A1 and A2 will be assessed by a review paper and survey report, A2 also by an essay and report. A3 will be assessed by a report, while a subject review and another paper will provide the basis for assessing A4. A5 will be based on the proposal, formative oral presentation, research paper, and an essay.

### Intellectual Skills

On completing the programme students should be able to:

- **B1.** Analyse environmental issues and transfer understanding across disciplinary boundaries
- **B2.** Collect and analyse environmental, social and economic information from a range of relevant sources including stakeholders, provide a coherent, balanced and integrated summary of a coastal system and communicate it.
- **B3.** Identify possible coastal management solution and institutional barriers to effective governance and communicate them coherently
- **B4.** Extract, collate and synthesise information from the global research literature to prepare a focused project on a specific subject and be able to appropriately and full contextualise the findings.

### Teaching and Learning Methods

B1 will be learnt through seminars, role play and an essay. B2 is based on seminars and it and B3 on the essay and report. B4 is built on preparation of an applicable paper but is learnt especially through a project proposal, subject review and paper

### Assessment Strategy

B1 and B2 are assessed formatively in seminars and summatively in an essay and report. B3 will be assessed in a report. B4 is assessed through the proposal and papers, all being subject to iterative formative assessment in class, through feedback and supervision and feedback.

### Practical Skills

On completing the programme students should be able to:

- **C1.** Report information in both oral and written forms to address issues in coastal zone science, management and governance, and assess it
- **C2.** Collect natural-resources information, analyse it statistically and manipulate it in electronic decision support systems
- **C3.** Conceptualise governance frameworks that integrate different sectors and disciplines and build a framework for a real coastal area
- **C4.** Comprehensively plan and manage an original piece of research on a selected topic.

### Teaching and Learning Methods

C1 is learnt through dedicated seminars and in-course tasks across all four modules, while C2 is gained in particular through seminars and in-course exercises. Learning of C3 derives specifically from the MST8024 teaching and in-course tasks. A proposal and subject review with ongoing supervision and project implementation provide the foundation for learning C4.

### Assessment Strategy

All the in-course tasks provide assessment of C1 skills, the C2 assessment relying on a statistical report and report; C3 is also assessed through this method. C4 assessment is based on the formative and summative assessment of the project proposal, feedback on the notebook and achievement of objectives in the paper and related oral and written presentations.
Transferable/Key Skills
On completing the programme students should be able to:

D1. Work professionally under pressure as an individual and in a small multidisciplinary team
D2. Write a complete comprehensive research proposal including contingency planning for an original study
D3. Comprehensively understand the research environmental, including funding schemes and policies, and conceiving, preparing for a project and making strategic and tactical decision about its achievement while under way
D4. Write and orally present a research paper to international students

Teaching and Learning Methods
All modules provide the opportunity to learn the D1 skill through their in-course tasks. Skills D2-D4 are learnt through work on the research project, including supervisions, detailed scoping, proposal writing, attending to the many dimensions of project preparation and inception (e.g. scientific, methodological, safety, health, ethical, data, logistical considerations) and successful management of the project, its deliverables and outputs.

Assessment Strategy
Major points of assessment in the in-course tasks for most modules are the means of assessing D1, while skills D2-D4 are assessed through the major tasks formatively (drafting of proposal, review and paper) and then summatively assessed in another module.

Programme Curriculum, Structure and Features
Basic structure of the programme
Three taught modules in semester 1
Research project in semesters 2 and 3

Key features of the programme (including what makes the programme distinctive)
A programme based on the School of Natural and Environmental Sciences’ Ecology and Modelling Evidence and Policy academic groups. Substantial research achievements and impacts include: work on tropical ecosystems but with a growing track record of North Sea science projects, studies involving the social and natural sciences and foci on coral reefs, food webs, fish and fisheries assessments and spatial management including marine protected areas. Overseas work is based on collaborations and partnerships including recent work across the Caribbean (coral reef states, management and governance) and in Indonesia (tuna fisheries sustainability), Maldives, Saudi Arabia (aquaculture environmental impacts), and the Bahamas (size structuring of food webs).

Programme regulations (link to on-line version)
-R4857FP.pdf (ncl.ac.uk)

Support for Student Learning
Generic information regarding University provision is available at the following link.
Generic Information
### 14 Methods for evaluating and improving the quality and standards of teaching and learning

Generic information regarding University provision is available at the following link.  
[Generic Information](#)

*Accreditation reports*

*Additional mechanisms*

### 15 Regulation of assessment

Generic information regarding University provision is available at the following link.  
[Generic Information](#)

In addition, information relating to the programme is provided in:

- The University Prospectus: [https://www.ncl.ac.uk/postgraduate/](https://www.ncl.ac.uk/postgraduate/)
- Degree Programme and University Regulations: [http://www.ncl.ac.uk/regulations/docs/](http://www.ncl.ac.uk/regulations/docs/)

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided.