
MLA COLLEGE

In partnership with

UNIVERSITY OF PLYMOUTH

**ACADEMIC PARTNERSHIPS**

# PROGRAMME QUALITY HANDBOOK 2023 - 2024

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# DipHE Hydrography for Professionals

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## Contents

# 1. Welcome and Introduction

Welcome to MLA College. We are delighted that you have chosen to study with us. We will do all we can to ensure sure you get the maximum benefit from your time here – and that you will be well prepared for the next stage in your academic or professional career path.

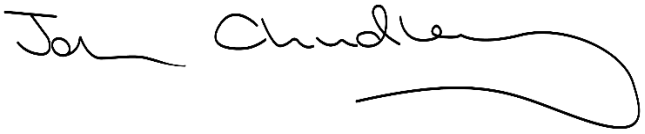
You will already know that MLA College is internationally recognised for its excellent reputation, and you will also benefit from the consistently high standards and expectations MLA College brings to all aspects of its teaching and learning.

You will find that all our staff are dedicated to ensuring you have the best experience possible. As well as being professional, intellectually challenging and up-to-date in their knowledge of the subject matter, we ensure that those teaching you do so in a research-informed, creative, responsive, and engaging way. Your tutors are supported by highly experienced professional colleagues who are here to give you advice and guidance on all aspects of your studies.

As a student at MLA College and the University of Plymouth your feedback is important to us and we have in place a number of surveys conducted by MLA College during your period of registration. Please do take the time to complete these surveys which will inform our plans to ensure all students continue to receive the best possible experience during their time with us.

We want you to enjoy the best study experience possible and we are here to help create the best opportunities for what you want to do next.

Welcome again to the MLA College.



Professor John Chudley, Rector

MLA College

# 2. About this Handbook

This Programme Quality handbook contains important information including:
The approved programme specification
Module records

**Note:** **The information in this handbook should be read in conjunction with the current edition of:**

- our University Student Institution Handbook which contains student support- based information on issues such as finance and studying at HE available here
- Your University of Plymouth Student Handbook available here :

# 3. Programme Specification

## 3.1. Brief description

MLA College's DipHE in Hydrography for Professionals is intended to meet the needs of the hydrographic survey industry and its workforce by providing a flexible, innovative programme of study. This part-time, blended learning programme is a combination of distance e-learning modules and residential sessions, which will ordinarily be progressed in the order set out in the programme outline. The students will have the opportunity to put theories into practice, in a real maritime environment, using the latest equipment. This programme will facilitate the development of those already working within the offshore industry, although employment at time of study is not a requirement. In addition, the programme provides a much-needed entry route into the survey industry for school leavers.

Modules have been designed to incorporate the latest technologies and innovations in e-learning, taking into account the fact that most students will be deployed in remote locations on board ships while studying, with extremely limited access to the Internet. Students have the opportunity to enrol upon each module in turn, allowing maximum flexibility in study, important for those working in shift patterns. Residential practical modules provide an important step within the programme being designed around the distance learning modules and are normally undertaken in the planned order. The Diploma programme has been designed alongside representatives from industry to meet their needs.

## 3.2. Awarding institution/body; teaching institution(s); accrediting body

The teaching institution is MLA College, and the awarding institution is University of Plymouth.

## 3.3. Relevant QAA Subject Benchmark Group(s)

Relevant QAA Subject Benchmark group is Earth sciences, environmental sciences, and environmental studies (2007) (ES3).

## 3.4. Admissions criteria, including APCL and APEL arrangements

**Broad scope**

Applications are welcomed from people who, in addition to any formal qualifications:

- can demonstrate the ability to succeed in the Diploma of Higher Education Hydrography for Professionals programme
- will derive the greatest benefit from studying with the University
- have a commitment and enthusiasm to learn

All applications are considered on individual merit in relation to the aims and outcomes of the programme. In order to increase the opportunity for engagement with Higher Education for those potential students who have not studied for some time, MLA College has developed a short introductory module, 'An Introduction to Hydrography and the Marine Environment' (EHYD101, 10 credits at Level 4). Studied over an 8-week period, this module allows students to test their suitability and aptitude for distance learning, provides a 'low-stress' reintroduction to Higher Education, and provides sponsored students with an opportunity to prove to their employer that further investment in undertaking the whole programme is worthwhile.

### 3.4.1. Qualifications for undergraduate entry to Hydrography for Professionals

Students with a mix of AS/A-Level and Vocational A-Level qualifications as well as specialisation in either are welcomed. The table below sets out normal minimum qualifications required for entry to Diploma of Higher Education Hydrography for Professionals programme.
The standard entry requirements will be one of:

- a minimum of two A-Level subjects
- the equivalent in the Vocational A-Level
- the equivalent as a mix of both qualifications
- other qualifications as noted in the table below

| Qualifications accepted | Level required |
|---|---|
| A-Level/AS Level/Vocational A-level | 96 points with a minimum of two A levels. This will normally be expected to include at least a pass at grade C in a science subject (Physics, Chemistry, Biology, Maths, Geology, Environmental Science) and/or other numerate discipline. AS Levels may contribute to a points offer. |
| GCSE or equivalent | GCSE in English and Mathematics (at grade C) or equivalent are required. |
| General Studies A-Level | Will not normally be accepted as an entry qualification. |
| AVCE Double Award | 280 with minimum of CC in a Science subject. Additional study would usually be required to achieve 280 points. 280 points =A*A*. |
| BTEC QCF Diploma and Extended Diploma | 280 points QCF Extended Diploma. Subjects studied need to demonstrate a commitment to studying science. Additional study would normally be required to achieve 280 points with the QCF Diploma. D*D* = 280 points. |
| Access to Higher Education | Pass approved course in relevant subject (Science and Technology preferred but other appropriate courses considered) with 33 merits at level 3 to include 12 merits in a Science subject. |
| National Vocational Qualification (including Advanced Modern Apprenticeships) | An appropriate NVQ at Level 3/AMA will be considered with other information that demonstrates your ability to successfully complete the programme you have selected. A commitment to studying science needs to be demonstrated. |
| Scottish Qualifications Authority | 120 points. At least one science subject (Physics, Chemistry, Biology, Maths, Geology, Environmental Science) passed at grade C. |
| Irish Leaving Certificate | BBBBC. At least one science subject (Physics, Chemistry, Biology, Maths, Geology, Environmental Science) passed at grade C. |
| International Baccalaureate | Offers will be made based on total points acquisition within the range of 24 points to include 4 in Higher Level Science or Maths. |
| European Baccalaureate | 72% point to include 7 in Science and Maths. |
| Greek National Apolytirion | Please enquire. Normally require achievement of 18/20 overall to include 18/20 in Maths/Science. |

For UK school leavers, offers will be based on results at the end of year 13, although AS grades gained at the end of year 12 may be used in conjunction with the predicted A-Level or Vocational A-Level grades as an important indicator of ability.

Offers made to mature applicants (over 21) may take account of work and life experience, and in particular, work experience gained within the offshore survey industry. It is likely that the majority of applicants to MLA College programmes will fall in this area. Applicants are expected to submit a full *Curriculum Vita* or résumé and an application form. Admissions tutors for MLA College will check all applications thoroughly and may also arrange an interview (usually by telephone or video conferencing) for potential students in order to assess their suitability for study. Offers are based on the information provided in the application documents and interview (where appropriate).

In general, due to the demands on the student of a programme of distance learning study, admissions tutors will recommend that a student only studies one MLA College module at a time (see Operational Specification 1.0). In this way, the modular nature of the programme and its progression coherency will not be compromised.

Progress of an individual student through EHYD101, "An Introduction to Hydrography and the Marine Environment" will enable staff to advise the student whether it is appropriate to pursue the DipHE programme.

### 3.4.2. Key Skills

We encourage the attainment of Key Skills at a high level to enhance performance on a higher education programme. Although key skills tariff points do not count towards the admissions tariff score, they will enhance performance on the degree programme.

### 3.4.3. Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL)

The University's regulations for Accreditation of Prior Certificated Learning (APCL) and Assessment of Prior Experiential Learning (APEL) are set out in the 'University Academic Regulations'. In the case of admission to DipHE Hydrography for Professionals, MLA College is keen to consider admission on the basis of work or life experience. Where an applicant presents with appropriate experience, this may be taken into account, regardless of age. MLA College Admissions Tutors may contact applicants for further information where an application includes a request to consider prior learning (APCL or APEL). Admissions tutors will typically require detailed evidence of study and achievement before a decision can be made.

### 3.4.4. English language requirements

If students have not obtained or do not have the appropriate entry qualifications in the English language, they may be required to produce evidence of English language ability. This will normally be the equivalent of:

GCSE Grade C or above in English language.
IELTS average score of 6.0 or above with a score of at least 6.0 in the written component.
TOEFL score of 88.

### 3.4.5. Overseas qualifications

The University Secretariat provides advice on, and maintains oversight of, the acceptability of any qualification from overseas. In general, MLA College Admissions Tutors can check the comparability of students with overseas qualifications through UK NARIC**,** a government agency who provide an advisory service.

### 3.4.6. Progression from other degrees

It may be possible for prospective students to transfer to DipHE Hydrography for Professionals from other programmes, at a stage of partial completion. The admissions tutor will review the material covered already by the student and make an assessment of the most appropriate entry point to the programme.

### 3.4.7. Summary of exceptions to university regulations

The University's Academic Regulations are implemented in full, with some exceptions to suit the teaching and learning requirements of a part-time distance learning programme:

MLA College recognises the demand from students to study a course that is both academically and professionally recognised. It is therefore appropriate to award a named qualification at Diploma level: "Diploma of Higher Education in Hydrography for Professionals".

No compensation in individual modules is permitted. This to ensure that all students reach the standards required for professional body approval.

Students will have a maximum of 8 years to complete the DipHE programme from date of first enrolment on EHYD101. This is an exception to University of Plymouth regulations, where 10 years are stated for part time programmes. This reduction to 8 years is to ensure subject currency is maintained during the programme of study.

#### Extenuating circumstances:

MLA College students have 4 calendar weeks (28 days) as the maximum period for extenuating circumstances

Instant referrals maybe used in appropriate circumstances More information is available in the student handbook which is available in your TLP and on the MLA website.

## 3.5. Distinctive features of the programme at University of Plymouth

Key features of the programme

The DipHE Hydrography for Professionals programme is an innovative blend of distance e-learning and residential practical sessions. The e-learning course materials are designed by a team of academics and learning technologists to provide a seamless Total Learning Package (TLP). This TLP incorporates the latest technological developments in a Virtual Learning Environment (VLE) which integrates online and offline components and can be downloaded to your laptop and/or desktop computer, so you must be able to download files of up to 650MB at the start of each term. This enables students to study successfully whilst deployed for extended periods offshore when access to the Internet is usually limited or absent. The TLP adds value to lecture material with formative testing, learning support materials and a significant element of practical work.

Residential practical sessions focus on the operational skills required to be an effective hydrographic surveyor. They also cover materials which are harder to convey through an e-learning medium, such as mathematics. Boat work, vessel handling and practical surveying over intensive two-week sessions build on the theoretical knowledge gained through the e-learning modules.

The programme has been designed in close collaboration with representatives from the Royal Navy's school of hydrographic surveying at FOST-HM and Fugro, the world's largest integrated supplier of geoscience and survey related services.

## 3.6. Titles for Final and Intermediate awards

Named final award:
"Diploma of Higher Education in Hydrography for Professionals"
A generic 'Certificate of Higher Education' will be awarded to students completing Level 4 with 120 Credits who do not continue their studies further to Diploma level (Level 5).

## 3.7. Programme Aims and Intended Learning Outcomes (mapped in accordance with QAA HE Qualifications Framework descriptors)

The Diploma of Higher Education in Hydrography for Professionals programme has the following overall aim:

To offer a comprehensive programme of study which provides the offshore industry employers, and their current and potential workforce, with opportunities to engage fully with Higher Education to produce respected hydrography graduates who can operate with safety to professional standards.

## 3.8. Programme aims

The general aims of the Diploma of Higher Education Hydrography for Professionals programme are as follows:

- To deliver an intellectually-stimulating programme of study, based on the fundamental scientific and technical aspects of hydrography, incorporating descriptive, quantitative, and practical aspects
- Develop in students the knowledge, skills and understanding relating to the theory and conduct of operational hydrography
- To enable students to acquire transferable, technical, and professional skills appropriate to personal and career development

## 3.9. Intended programme learning outcomes

### Knowledge and understanding (KU)

On completion graduates should have developed:

- A broad understanding of the underpinning mathematical and scientific principles to undertake hydrographic work.
- Knowledge and understanding of the established principles in hydrography and the way in which those principles have developed
- A fundamental practical understanding of the equipment and processes used to conduct hydrographic surveys and the analysis and reporting of related data
- Cognitive and intellectual skills (CI)
- On completion graduates should have developed:
- Skills in gathering, analysing, evaluating, and interpreting qualitative and quantitative data relating to a hydrographic survey work
- To develop arguments and make sound judgements in accordance with basic knowledge and concepts in hydrography
-

### Key and transferable skills (KT)

On completion graduates should have developed an ability to:

- Communicate the results of their scientific and technical work accurately and reliably, and with structured and coherent arguments
- Critically analyse marine environmental information to support optimum use of hydrographic equipment
- Employment related skills (E)
- On completion graduates should be able to:
- Reflect on own learning development and style with application to professional career development
- Complete survey tasks using a wide range of relevant equipment and techniques
- Practical skills (P)
- On completion graduates should be able to:
- Work effectively as part of a small hydrographic survey team and be able to manage basic planning
- Use and apply appropriate hydrographic surveying software and surveying techniques to gather and present data
- Analyse and evaluate data, utilising relevant problem-solving abilities

## 3.10. Intended programme learning outcomes mapped against modules

**Knowledge and understanding**

| Programme Learning Outcome | Related Core Modules |
|---|---|
| 1. A broad understanding of the underpinning mathematical and scientific principles to undertake hydrographic work. | EHYD102a, EHYD105a<br>A self-study package is a pre-task for EHYD105a |
| 2. Knowledge and understanding of the established principles in hydrography and the way in which those principles have developed. | EHYD101, EHYD102a, EHYD103, EHYD105a, EHYD202, EHYD204b |
| A fundamental practical understanding of the equipment and processes used to conduct hydrographic surveys and the analysis and reporting of related data | EHYD102a, EHYD103, EHYD104, EHYD105a, EHYD201, EHYD202, EHYD204b |

**Cognitive and intellectual skills**

| Programme Learning Outcome | Related Core Modules |
|---|---|
| 1. Skills in gathering, analysing, evaluating, and interpreting qualitative and quantitative data relating to a hydrographic survey work. | EHYD105b, EHYD204b |
| 2. To develop arguments and make sound judgements in accordance with basic knowledge and concepts in hydrography. | EHYD102a, EHYD105b |

**Key and transferable skills**

| Programme Learning Outcome | Related Core Modules |
|---|---|
| 1. Communicate the results of their scientific and technical work accurately and reliably, and with structured and coherent arguments. | EHYD102a, EHYD104 |
| 2. Critically analyse marine environmental information to support optimum use of hydrographic equipment | EHYD105b, EHYD203, EHYD204b |

**Employment related skills**

| Programme Learning Outcome | Related Core Modules |
|---|---|
| Reflect on own learning thoughtfully with a view to learning development and style. | EHYD101, EHYD105b, EHYD204b |
| Complete survey tasks using a wide range of relevant equipment and techniques | EHYD101, EHYD105b, EHYD204b |

**Practical skills**

| Programme Learning Outcome | Related Core Modules |
|---|---|
| 1. Work effectively as part of a small hydrographic survey team and be able to manage basic planning | EHYD105b, EHYD204b |
| 2. Use and apply appropriate hydrographic surveying software and surveying techniques to gather and present data | EHYD102a, EHYD103, EHYD104, EHYD105b, EHYD201, EHYD202, EHYD204b |
| 3. Analyse and evaluate data, utilising relevant problem-solving abilities | EHYD105b, EHYD204b |

## 3.11. Programme relationship with QAA Subject Benchmark Statement

The Earth Sciences, environmental sciences, and environmental studies (ES3) QAA Benchmark Statement (2007) identifies that graduates of programmes in the ES3 subject grouping will have developed a range of skills and aptitudes. The themed nature of the programme means that the benchmark statements are met in various modules, in different forms, rather than forming specific structure and module content of the programme. The mapping below indicates (a) key modules in which students meet these benchmark statements, and (b) the programme learning outcomes that reflect the QAA benchmark. The benchmarks may be met in other modules, and other programme learning outcomes as well, in different contexts.

The QAA statement identifies (a) Knowledge, (b) Intellectual Skills, (C) Practical skills, (d) Communication skills and Interpersonal/teamwork skills, (e) Self-management and professional development skills and (f) Numeracy and C & IT skills. These skills are listed in the table 1-6 below and mapped to representative modules and programme learning outcomes. Programme Learning Outcomes are coded as: Knowledge and Understanding (KU); Cognitive and Intellectual Skills (CI); Key and Transferable Skills (KT); Employment Related Skills (E); Practical Skills (P). The number refers to the relevant learning outcome listed in section 8.2 (Intended Programme Learning Outcomes).

**Table 1**

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Knowledge**<br><br>Graduates of programmes in ES3 should understand: | | |
| the need for both a multidisciplinary and an interdisciplinary approach in advancing knowledge and understanding of Earth systems, drawing, as appropriate, from the natural and the social sciences. | EHYD102a | KU 1 |
| the processes which shape the natural world at different temporal and spatial scales and their influence on and by human activities | EHYD201 | KU1 |
| the terminology, nomenclature and classification systems used in ES3 | EHYD102a | |
| methods of acquiring, interpreting and analysing ES3 information with a critical understanding of the appropriate contexts for their use | EHYD204b | KU1 |
| issues concerning the availability and sustainability of resources, for example, the different value sets relating to the Earth's resources as commodities and/or heritage | EHYD104 | KU1 |

| | | |
|---|---|---|
| the contribution of ES3 to debates on environmental issues and how knowledge of these forms the basis for informed concern about the Earth and its people | EHYD104 | KU1 |
| the contribution of their subject to the development of knowledge about the world we live in | EHYD203 | KU1 |
| the relevance of knowledge and skills acquired on their programme of study to professional activity, responsible citizenship, and the world of work. | EHYD203 | KU2<br>E1 |

**Table 2**

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Intellectual Skills**<br><br>The graduate key skills that should be developed in ES3 degree programmes are: | | |
| recognising and using subject-specific theories, paradigms, concepts, and principles | EHYD204b | CI1 |
| analysing, synthesising and summarising information critically, including prior research | EHYD203 | CI1 |
| collecting and integrating several lines of evidence to formulate and test hypotheses | EHYD104 | CI2 |
| applying knowledge and understanding to complex and multidimensional problems in familiar and unfamiliar contexts | EHYD204b<br>EHYD202 | CI2<br>CI2 |
| recognising the moral and ethical issues of investigations and appreciating the need for professional codes of conduct. | | |

**Table 3**

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Practical skills**<br><br>The graduate key skills that should be developed in ES3 degree programmes are: | | |
| planning, conducting, and reporting on investigations, including the use of secondary data | EHYD204b | P1 |
| collecting, recording, and analysing data using appropriate techniques in the field and laboratory | EHYD204b<br>EHYD105b | P2 |
| undertaking 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 referencing work in an appropriate manner. | | P1 |

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Communication skills and Interpersonal/teamwork skills**<br><br>The graduate key skills that should be developed in ES3 degree programmes are: | | |
| receiving and responding to a variety of information sources (e.g. textual, numerical, verbal, graphical) | EHYD105b | CI1 |
| Communicating appropriately to a variety of audiences in written, verbal, and graphical forms. | EHYD204b<br>EHYD105b | KT1 |
| Identifying individual and collective goals and responsibilities and performing in a manner appropriate to these roles | EHYD105b | P1 |
| Recognising and respecting the views and opinions of other team members | EHYD204b | P1 |
| Evaluating performance as an individual and a team member. | | E1 |

**Table 5**

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Numeracy and C & IT skills**<br><br>The graduate key skills that should be developed in ES3 degree programmes are: | | |
| Appreciating issues of sample selection, accuracy, precision, and uncertainty during collection, recording and analysis of data in the field and laboratory | EHYD202 | KU1 |
| Preparing, processing, interpreting, and presenting data, using appropriate qualitative and quantitative techniques and packages including geographic information systems | EHYD202 | CI1 |
| Solving numerical problems using computer and non-computer-based techniques | EHYD105b | KU3 |
| Using the internet critically as a means of communication and a source of information. | EHYD203 | KT2 |

**Table 6**

| QAA Benchmark | Key module | Most Relevant Programme Learning Outcome |
|---|---|---|
| **Self-management and professional development skills**<br><br>The graduate key skills that should be developed in ES3 degree programmes are: | | |
| Developing the skills necessary for self-managed and lifelong learning (e.g. working independently, time management and organisation skills) | EHYD101 | E1 |
| Identifying and working towards targets for personal, academic and career development<br>Developing an adaptable and flexible approach to study and work. | EHYD101 | E1 |
| | EHYD101 | E1 |

## 3.12. Teaching and Learning Strategies

Provision of education and training by distance and online learning has become well established within universities and corporate institutions. It has been noted by the majority of researchers that when a quality classroom-based learning programme is compared to a quality online learning programme, people learn equally well, and achieve broadly equivalent results regardless of the method of delivery[1].

[1] Nistor *et al*., 2003; Bramble & Panda, 2008.

It is widely recognised that a student's success on an online learning programme is driven by the level of interaction, which can be in terms of tutor-student interaction and student-student interaction. A student isolated within an e-learning environment is unlikely to maximise his or her potential and, therefore, a blended learning approach which facilitates at least some interaction is highly desirable. Blended learning has been shown to increase achievement in tests, result in higher completion and retention rates, improve student satisfaction, as well as offering learners a more efficient, flexible, and varied learning experience[2]. Online interaction and collaboration between students will be fostered through the use of technology (bulletin boards and discussion forums), and synchronous online conferences are also a possibility.

MLA College has developed a comprehensive teaching and learning strategy based on a blended learning solution of e-learning material and assessment studied remotely, and intensive on-site practical sessions. Some of the key teaching and learning considerations relating to the design of MLA College's e-learning environment and course materials are as follows[3]:

- To facilitate an individual's learning
- To bring together students from diverse locations, with individual interests, skills and needs to form learning communities
- To state expectations clearly
- To set and maintain rigorous academic standards, and communicate expectations clearly
- To be adaptable with regard to learner's needs
- To communicate clearly and effectively
- To make consideration of the different abilities and learning styles of students
- To encourage discussion, debate, and critical thinking

Early research indicated that all learning materials should:

- Be able to be accessed in any order and still make sense. It can only be suggested that a student follow the materials in a given order, and many are used to taking a hypertext approach of randomly clicking links in an online environment
- Meet the learning styles and preferences of different types of students
- Be able to be used by students across platforms and differing levels of technology
- Be transportable and light in physical weight
- Be able to be used without a regular internet connection
- Be supported by a tutor, available regularly to individual students for advice and to deal with subject specific and general academic queries
- The MLA College materials use a balanced approach of constructivism and behaviourism, whereby students are 'lectured' in some way and are then exposed to practical applications and activities.

In general, the e-learning material comprises narrated PowerPoint lectures, with accompanying transcript and notes. Each lecture is followed by a series of formative tests allowing the student to test their own progress and knowledge. The learner is then given the opportunity to revisit the lecture material as many times as they feel is necessary to meet the learning outcomes for that section and complete the formative assessment to an appropriate standard. The HTML-based nature of the programme means navigation within

[2] Bramble & Panda, 2008. Chapter 2

[3] Adapted from Porter, L. 2004. *Developing an online curriculum. Technologies and Techniques*. Information Science Publishing, London. 316 pp.

the package is similar to navigating around a website, this presents the student with a familiar environment which is not platform (operating system) specific.

Within the e-learning environment, there is scope to incorporate practical work, which the student will complete using either manual methods (such as calculations or observations of a particular experiment) or an appropriate software package, such as Microsoft Excel and "lite" versions of industry software. These are designed carefully to mimic the experiences of a student undertaking a more traditional 'lab session' on campus and will ensure a similar level of practical ability is attained in the relevant topic areas. This aspect will assist in preparing students for the residential practical sessions.

The residential modules (**EHYD105b**, **EHYD204b**) are very intensive in nature, and allow the students an opportunity to explore other modes of teaching and learning. A particular focus of **EHYD105b** is mathematics tuition, and this is provided in a classroom environment, as it is beyond the scope of the MLA College to develop and supply a comprehensive range of mathematics e-learning materials. MLA College will, however, add appropriate supporting mathematics materials for reference and review to the TLP of appropriate modules in the programme, and will including a pre-study maths package for **EHYD105ba**. Up to date equipment is used in the practical work, so that students coming from the leading edge of the offshore industry are able to use familiar equipment in an educational setting. Having students on site facilitates learning through group work and allows them a chance to undertake formal written examinations (including in mathematics). These modules will also consist of preparatory elements and post-residential review, processing and report writing conducted through distance learning. Time expiry software licences will enable in-depth analysis of data on completion of the final module and facilitate a challenging and industry relevant project linking practical sessions to the advanced theory gained throughout the programme.

Each student is assigned a personal tutor whilst enrolled on an MLA College module. The tutor will ensure that any student queries or requests for support are dealt with within 48 hours of receipt and will provide a 'friendly face'. Typically, all enquiries will be closed the same working day, but support is not provided by the academic team during the evenings or weekends and is limited to UK working hours only (also see section 12). This is a critical aspect of MLA College's provision, and will ensure that all students, the majority of whom are in remote locations abroad, receive an exemplary teaching and learning experience.

### 3.13. Assessment strategies and methods (mapped against modules, alternative and inclusive assessment strategy)

**General position**

The programme implements the University's Academic Regulations, with some exceptions (section 5.0). Students complete a total of 120 credits at each Level. The overall mark for each student is built on the cumulative mark awarded for each of the modules taken during Level 5 of the programme. The format of assessment is identified in the DMR for each module, and the Programme Manager maintains an oversight of assessment across the programme. Module Leaders are responsible for assessments within each module and arrive at a mark for each student for each module, and The Programme Manager oversees a review of exams and referral coursework material by the External Examiner as required.

**Relationship between assessment, Subject Assessment Panels and Award Assessment Boards**

**The general process is as follows:**

Students undertake a programme of study, enrolling and making payment on a module by module basis. Students undertake assessment by coursework and/or exam as appropriate to the nature of the module delivery. External examiners may review assignment briefs/exams prior to them being

set (exams and referral coursework) to help ensure that levels are appropriate and equivalent to other institutions. External examiners review a sub-section of coursework and exams as required at Level 5 to ensure marking is at an appropriate level. Level 4 work will also be reviewed throughout the tenure of the first external examiner to provide best practice as the course matures. Marks (collated by MLA College staff) are considered at the MLA College Panels. Due to both the modular nature and the all-year-round operation of the programme it may be necessary to hold panels at multiple times per year. This is to be organised by collaboration between module leaders, external examiners, and University of Plymouth Academic Partnerships staff. At the Panels, Programme Managers/Module Leaders (a) check (and confirm) the marks for the module; (b) identify any irregularities in assessment (e.g. factors affecting assessment, or cases of academic dishonesty) that need to be considered.
Shortly after the Panels, the MLA College Boards consider individual student profiles, and make a decision on the route of progression for each individual student, as per the regulations. Referral work is offered for External Examiner review and considered at Panels and Boards. As with assessment panels it may be necessary to hold panels at multiple times per year. This is to be organised by collaboration between module leaders, external examiners, and faculty administration staff.

**Feedback and evaluation**
The control, feedback and evaluation on assessment strategy sits within the normal School framework. The procedures followed are guided by the School Teaching and Learning Committee, which is in turn informed by the Faculty Teaching and Learning Committee. Assessment is considered as part of the Annual Review procedure, when problems are identified, or when evolutions are required. Specific identifiers may include module feedback points, consideration of marks range at the MLA College Panels, and/or External Examiner comments during the year, at the Panels, or in report.

**Alignment, inclusivity, and variety**
Assessments are specifically set to encourage work towards the learning outcomes of the modules and will aim to test all the learning outcomes in the individual modules. It is recognised that this is not possible in all instances (e.g. group work in the first attempt assessment cannot be replicated in a referral assessment) but is applied where feasibly possible.

**Workload**
Due to the nature of the delivery of the programme an expected assessment workload is proposed as follows:

For a 30-credit module, a student would typically be expected to submit two pieces of coursework and one exam, or undertake three pieces of coursework, not exceeding 8,000 words in total. As MLA College programmes are delivered in a modular fashion, there is unlikely to be any particular issue with assessment conflicts with other modules, as can occur with a student enrolled on a full-time course. Students will typically be enrolled on only one module at a time but may be enrolled in a maximum of two in exceptional cases. The latter case will generally only occur when the delivery of the modular programme would cause undue delays to a student's overall study calendar.

**Assessment criteria**
The basic content of material to be assessed is guided by the QAA subject benchmark statements. Assessment criteria are set in line with the SEEC level descriptors.
It is good practice for Module Leaders to identify the assessment criteria for their work ahead of setting work, and this is encouraged within the programme where possible, however, it may not

always be appropriate to give an absolutely explicit scheme (e.g. where a mark scheme gives too much 'steer' in the derivation of an equation or a numerical solution, or where the question is investigative, and the response is open). Where mark schemes are not possible, Module Leaders are encouraged to develop guidelines and broad threshold statements.

A default mark scheme for coursework, is presented in Appendix 1. This is applied where alternative schemes are not developed by the Module Leader, or where the Module Leader decides this scheme is appropriate.

**Second marking/internal mark moderation**
Module Leaders are responsible for collating module marks and identifying who will mark each component. Each component is subject to an internal moderation process in which:

The first marker marks all the work.

Marking of a selection (subset) of work is checked by a second member of staff. The assessments checked will generally include a selection from the top, middle and bottom of the mark spectrum. The internal moderator is looking to check that levels of assessment are appropriate. The moderator may also be requested to advise on borderline cases. The Module Leader will decide on appropriate action in the event that the moderator highlights marking issues. Recruitment of the second member of staff is the responsibility of the Module Leader.

The subset of marked work will be made available to the External Examiner, who also has the opportunity to check the level of work.

The process of internal moderation provides a useful mechanism for sharing module material and assessment practice amongst the team.

Where second marking is not possible or appropriate (e.g. second marker availability), the situation and the assessment will be identified to the External Examiner, and the first marker's mark will be used.

**Assessment methods**
An appropriate mix of formative and summative assessments will be provided throughout the programme. Due to the distance learning nature of the course, the majority of assessment will be undertaken through coursework submission. Formal examination and technical skill assessment will form a substantial majority of the assessment aspect of the residential course.

The MLA College team has undertaken a significant amount of research and development work, to ensure that the assessments are all authentic, varied, and provide a true measure of a student's progress and development. Examples of some approaches incorporated within the teaching and learning environment are as follows:

- Professional portfolio: Enables developmental work in PDP, and relating studies to professional practice
- Essay writing: Facilitates the demonstration of subject knowledge and research findings
- Technical report writing: Develops scientific, communication and technical skills
- Presentations: Traditionally presentations do not lend themselves to distance learning assessment however, by utilising technologies available it is possible to introduce this important assessment style to this programme.

- Group working: Building on the development of the community within the cohort, students will use the online discussion area to work in groups to complete a group assignment.
- Peer assessment: This is a major technique used in group work and it can be utilised as a good tool for building a group's community before any major group coursework submission takes place.
- Lab work and technical skills: These aspects will be facilitated through the innovative use of software and learning technology.
- Formal examinations: these will be completed as part of the residential sessions to meet academic and professional body regulations.

**Assessment timing**
As students enrol on a module-by-module basis, there is unlikely to be any issue with a conflict in assessment timing, or 'bunching', as can be experienced by a student studying multiple modules on campus. All MLA College modules have been designed in order to spread assignments appropriately throughout the module study period.

**The development of assessment**
Assessment approaches vary according to the level of the programme and develops through the themes of the programme. The overall ethos is that in Level 4 the fundamental principles are taught. In Level 5 the knowledge base is applied and deepened.

## 3.14. Programme outlines

See Section 3 for full details of the programme and individual modules, together with indicative content.

Students have complete flexibility in terms of when they choose to enrol on the next module in sequence, as the majority of modules will be offered up to twice per year, generally outside the standard university academic calendar. This will ease the burden on the admissions and administrative teams, whilst providing the students with the maximum opportunity to engage with the university.

Careful planning of the module start, and end times will be undertaken to ensure that the requirement for Panels and Boards with an external examiner present will be in the order of once or twice per year.

To meet the needs of individual students, it is intended that progression from the MLA College DipHE to Level 6 (Bachelors) may be achieved in a variety of ways, for example, completion of Level 6 by distance learning through another institution or by full or part time residential study at University of Plymouth or an appropriate institution in the student's home country. Direct progression from the MLA College DipHE to Level 7 (Masters) could be achieved through work experience and training. It is envisaged that a typical student would need to have undertaken at least three years of work, evidenced through a professional portfolio, before being considered for entry to the PGDip Advanced Hydrography for Professionals programme.

## 3.15. Specific issues

The unique nature of MLA College's programmes means there are certain areas and specific issues that must be recognised and dealt with in order to ensure the successful delivery of courses. The main difficulty is the distance learning aspect and the challenges posed by teaching students in different time zones and in International and remote locations.

**Time Zones**
Students can be located in time zone both east and west of the UK. In order to overcome difficulty in making contact with students via Skype or phone, the course tutors will offer time slots both early in the morning and

late in the afternoon, so students overseas can still make contact if they need to within the normal working hours of their location.

**International and remote locations**

Students can often be located offshore on ships or platforms and may not have a reliable broadband internet connection. Students are often very restricted in the amount of data they can receive or send (this can often be limited to text only email). The modules have been specifically designed to take this into account. The Total Learning Package (TLP) can be downloaded to your laptop and/or desktop computer, so you must be able to download files of up to 650MB at the start of each term. It includes fully comprehensive video narrated lectures as well as a wealth of supplementary material to aid the student as fully as possible when they are without an internet connection. Students are expected to have access to a broadband internet connection at the beginning, middle and end of the course. This is an essential requirement that students are made aware of before they are admitted to the course. This is to facilitate enrolment, formative feedback, and coursework submission. The TLP also includes a number of links to online areas such as the Tulip site and online discussion areas for the course. The interface allows for a seamless transition to these areas when the students have an internet connection.

**Residential practical sessions**

The duration of the two residential practical modules will be in the order of two weeks each. These modules will be planned in to facilitate the numbers of students, and it is likely that two of the two-week sessions will run each summer in the UK. In this way, there is some flexibility to accommodate a student's work patterns.

**Generic graduate skills:** Planning longer term projects, carrying out research in an organised way, selecting appropriate information, analysing data, critical appraisal of data, writing reports, meeting deadlines, and giving presentations are key skills that graduates of any science degree are expected to be able to exhibit.

Students are directly guided through elements of PDP at various stages in their programme. Specific examples of supported (guided) experiential learning towards professional skill development in the programme of work are as follows:

| Area of programme | PDP development | Staff involved |
|---|---|---|
| Level 4<br><br>EHYD101: An introduction to Hydro and the Marine Environment | Introduction to PDP and why useful<br><br>Introduction to recording (e.g., electronically)<br><br>Specific PDP reflective coursework | Cross, Martins |
| Level 5 | PDP re-visited<br><br>Reflective reports on research meth project management and career development<br><br>CV development<br><br>Career targeting<br><br>Specific PDP reflective coursework | Cross, Martins |

The underlying ethos is that students are encouraged to monitor the skills they are developing and the subjects they are learning about, recording them, and considering them in the wider context of future careers.

## 3.16. Appendix 1. Generic mark scheme for coursework

This section provides general guidelines on the criteria for the assessment of coursework on the DipHE Hydrography for Professionals. Module leaders will provide more specific guidelines on individual assignments.
Grading system for assessments:

Coursework and examinations will normally be marked using a categorical marking scheme of grades, in conjunction with a set of generic marking criteria.

Assessments will be given an alphabetic grade (A-F), which is equivalent to a degree classification band and is modified with a plus or minus sign dependent on the standard within the band.

The conversion to a numerical percentage takes place only when the grades are entered into the marks spreadsheet for each module. These percentage marks are uploaded into the University student records system and are used to calculate aggregate scores for each module and the overall programme mark.

The criteria specified here are necessarily general and qualitative. It is important to remember that not all criteria will have equal weighting and that not all aspects of submissions will necessarily meet all criteria for the grade awarded. Strong performance against one criterion may compensate for weaknesses in other areas and particular weaknesses may lead to a reduction in the overall grade. These guidelines are merely intended to provide a broad benchmark for the preparation and self-appraisal of assignments prior to submission.

| Criteria | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| **Content** | Fully addresses the assessment brief using all relevant information with few errors | Addresses the assessment brief with most facts relevant and no significant errors | Addresses the assessment brief using core information but some gaps in hydrographic knowledge | Addresses the assessment brief but containing a minimal amount of the required material | A marginal fail, does not contain enough relevant information to address brief and/or contains multiple errors | Clear fail that does not address assessment brief, with totally inadequate or irrelevant information |
| **Understanding and Evaluation** | Full understanding of topic within wider context. Full critical evaluation with arguments supported by evidence and examples. | Substantial understanding demonstrated. Critical evaluation present with arguments supported by evidence. | Adequate understanding demonstrated although evaluation may be limited with restricted use of evidence | Enough understanding demonstrated but with minimal evaluation and/or evidence offered | Marginal understanding demonstrated that lacks evaluation and evidence | A concerning lack of understanding and evaluation present. |
| **Originality/ Independent Thinking** | Evidence of considerable insight and independent thinking e.g. by including own views; making connections with other subject areas etc. | Substantially correct independent thinking with links to other areas/studies. | Some individuality within the assessment but not always fully explored | Own views minimally offered and/or displaying scientific naivety | Marginal originality and/or independent thought | No evidence of any valid independent thought |
| **Data Analysis and Interpretation** | An analytical/discriminating approach to the data, applying appropriate statistics. Comprehensive understanding of implications & limitations of the data | A sound approach to data analysis, applying valid statistical tests. Good understanding of data and associated limitations | Suitable approach to most aspects of data analysis. Valid interpretation but gaps evident | Data analysis attempted but limited, including weak interpretation | Marginal or insufficient data analysis and interpretation | No, or wholly inappropriate, data analysis and interpretation |
| **Use of Literature** | Evidence of consulting wide range of valid sources of information, especially primary literature. Uses findings to support facts and arguments. Appropriately | Evidence of consulting a range of literature to support facts and statements. Mostly cites references sources in correct | Evidence of consulting a limited range of literature, often with a reliance on textbook sources. | Some reference to literature evident but statements not well-supported. References often | Marginal reference to literature with little attempt to incorporate references into | No, or totally inappropriate reference to literature |

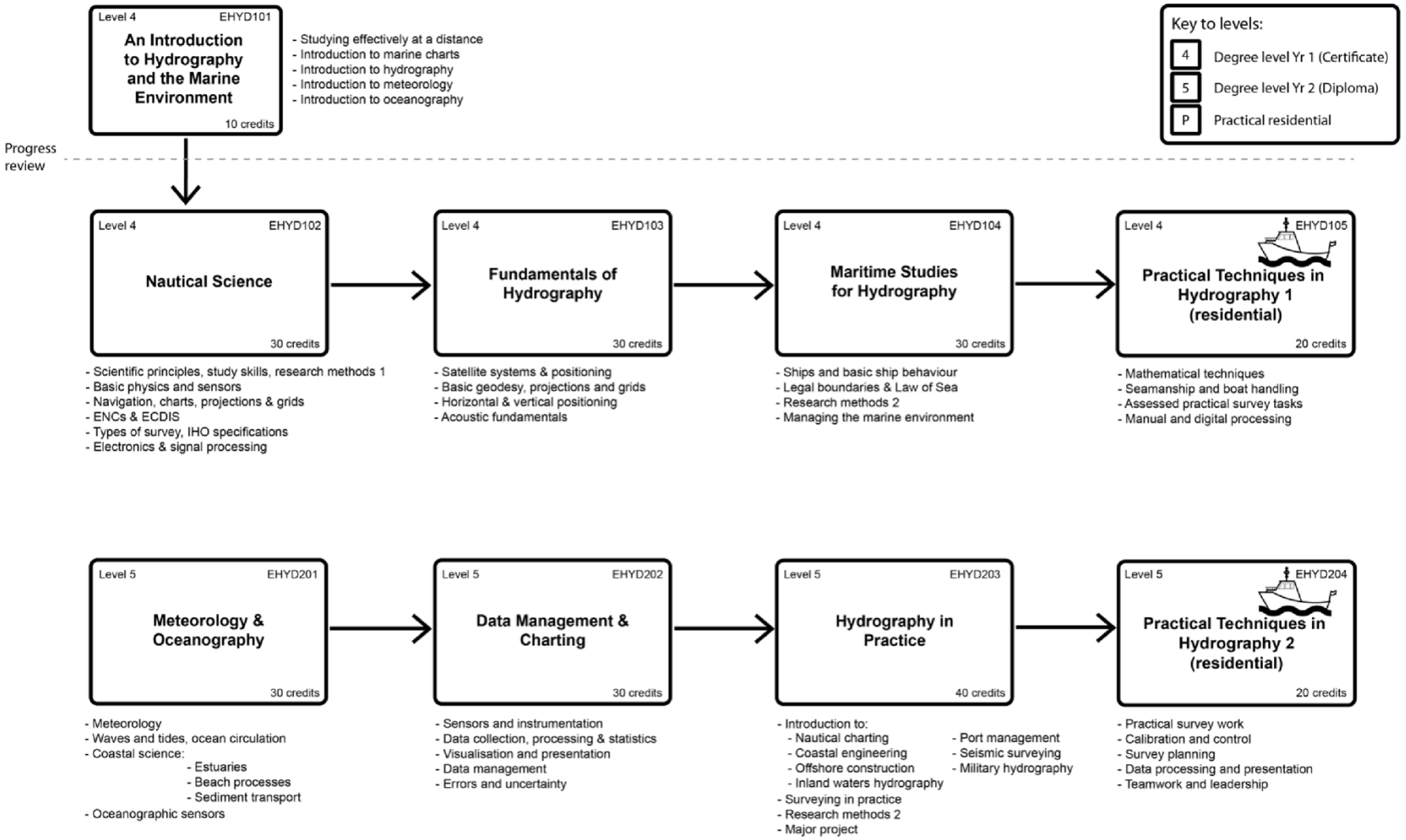
| | | | | | | |
|---|---|---|---|---|---|---|
| | references sources within the text and in the reference list | format within the text and in the reference list | References in text or list may contain errors | incorrectly cited and/or listed | work and/or incorrectly cited. | |
| **General Communication Skills** | Excellent overall standard of presentation, exhibiting a high standard of English and clarity of expression. Excellent layout and structure of material. Legible handwriting or appropriate use of fonts. Highly effective use of relevant visual material. | High standard of presentation, exhibiting a good standard of English and clarity of expression. Good layout and structure of material. Legible handwriting and use of fonts. Good use of relevant visual material. | Adequate standard of presentation, using acceptable standards of English. Some attention to layout, structure and formatting may be needed. Visual material may need some attention. | Low standard of presentation with grammatical errors. Layout and structure may reduce impact and communication. Use of visual material not well-incorporated | Marginal standard of presentation. Poor use of English with clumsy structure. Handwriting may not be legible and/or inappropriate use of fonts. Visual material typically not relevant. | Totally unacceptable standard of presentation with concerning use of English. No, or totally inappropriate, use of visual material. |
| **Independence and Use of Support** | Completely self-motivated; works independently or in collaboration with others where relevant. Seeks appropriate support as necessary. Formulates problem and relevant questions prior to seeking advice. Is meticulous in acknowledging support and contribution of others. | Mostly self-motivated and able to work well alone or in team. Seeks appropriate support as necessary. Acknowledges support and contribution of others. | Able to work independently or in a team but may not always access enough support where necessary | Partly relies on others for motivation or to ensure progress and may be reluctant to seek necessary help. Weak team member. Does not always acknowledge sources of support. | Depends on others for motivation or fails to seek necessary advice. Fails to work as member of a team. Work may be highly derivative and/or support not acknowledged. | Fails to start or progress with tasks. Does not seek and/or use help. Makes no contribution as member of a team. Does not acknowledge support and/or plagiarises. |

**The Grading Scheme**

| Degree Class | Grade | | Numerical Equivalent (%) |
|---|---|---|---|
| | A+ | | 95+ |
| First | A | | 85 |
| | A- | | 75 |
| | B+ | | 68 |
| Upper second | B | | 65 |
| | B- | | 62 |
| | C+ | | 58 |
| Lower second | C | | 55 |
| | C- | | 52 |
| | D+ | | 48 |
| Third | D | | 45 |
| | D- | | 42 |
| | E+ | | 38 |
| Fail (marginal) | E | | 35 |
| | E- | | 32 |
| | F+ | | 25 |
| Fail | F | | 15 |
| | F- | | 5 |
| No acceptable answer | 0 | | 0 |

# DipHE HYDROGRAPHY FOR PROFESSIONALS

MLA COLLEGE



# 4. Module Records

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD**. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD101** | **MODULE TITLE: An Introduction to Hydrography and the Marine Environment** | |
| **CREDITS:** 10 | **FHEQ LEVEL: 4** | **HECOS CODE(S) [max 3]: F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
This module will provide an opportunity for the student to revise and enhance their basic level understanding of hydrography and the marine environmental processes which affect it. Additionally, learners will gain and practice valuable core skills, including studying at a distance using an e-learning environment

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to develop in the student a basic awareness of the physical processes which shape the marine environment, and the sources of information available to the hydrographic surveyor. The application of key topic areas in the marine environment and maritime studies to hydrography is explored, and learners will have the opportunity to develop and enhance their learning skills.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. 1. Apply the skills necessary to participate effectively as an online learner<br>2. Appreciate the extent, nature and importance of the marine environment, and the equipment available to the hydrographic surveyor at sea<br>3. Describe the main physical processes responsible for change within the marine environment<br>4. Relate basic maritime studies knowledge in areas such as publications, charting, navigation, | Student has met the LOs of the module with evidence of basic knowledge & understanding of the marine environment and the physical processes which can affect the hydrographic surveyor.<br><br>The work is limited to basic description and analysis and shows evidence that the student can apply learning to straightforward problems and practical contexts. |

| | |
|---|---|
| rule of the road, navigation, and pilotage to professional practice | |
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 04/2013 | **SCHOOL/PARTNER:** MLA |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content**

A broad introduction to the marine environment and surveying, including atmospheric circulation and oceanographic properties. Application of studies to professional practice. An introduction to publications, charting, rule of the road, navigation and pilotage.

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information)** |
| Lectures (online) | 35 | Indicative figures for distance learning |
| Tutorials and formative assessment (online) | 15 | Indicative figures for distance learning |
| Directed and self-study | 10 | Reading and associated study |
| Personal development planning | 9 | Reflection within portfolio |
| Professional portfolio | 31 | Completion of assessment |
| **Total** | **100** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Professional Portfolio | 100% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Professional Portfolio | 100% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>Date: 14th December 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD102A** | **MODULE TITLE: Nautical Science** | |
| **CREDITS: 30** | **FHEQ LEVEL: 4** | **HECOS CODE(S) [max 3]: F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
This module will allow the student to build on the material introduced in the first introductory Marine Learning Alliance module, to develop learning and study skills together with an understanding of underpinning scientific principles. An introduction to aspects of nautical science important to the professional working in the marine environment are also provided.

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to introduce the student to the underpinning scientific principles, study methods and elements nautical science important to professionals working in the marine environment

**ASSESSED LEARNING OUTCOMES:**).

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Exhibit a sound understanding of underpinning scientific principles and methods relevant to marine sciences<br>2. Apply study skills and research methods effectively in a programme of undergraduate study<br>3. Demonstrate an awareness of the theoretical and practical aspects of nautical science required by the hydrographic surveyor working at sea | Deliver a professional portfolio to meet LO1 & LO2, scientific principles, basic physics & sensors.<br><br>LO3 Navigation, ENC, types of survey, electronics & signal processing. |
| **DATE OF APPROVAL**: 05/2015 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 05/2015 | **SCHOOL/PARTNER: MLA** |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: This module has replaced EHYD102 with the only change being to now correctly reference MLA rather than the HA (May 2015, Ross Pomeroy). | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content:**
An introduction to study skills and research methods, including accessing a range of learning resources, report writing, referencing and portfolio development. Study of key scientific principles relevant to studying generic nautical science subjects, such as measurement, units, and basic physics. Study of the terminology appropriate to hydrography, including survey specifications, electronic charts, communication at sea and rule of the road; together with an introduction to safety and seamanship**.**

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information)** |
| Lectures (on-line) | 130 | Indicative figures for distance learning |
| Tutorials ad formative assessment (on-line) | 15 | Indicative figures for distance learning |
| Practical work (on-line) | 10 | Including measurement and units, basic physics, and electronics |
| Directed Self-Study, personal development planning and completion of summative assessment | 155 | Reading and associated study leading to assessment |
| **Total** | **300** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Marine Science<br>Working in the Marine Environment | 60%<br>40% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Marine Science<br>Working in the Marine Environment | 60%<br>40% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>Date: 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD103** | **MODULE TITLE: Fundamentals of Hydrography** | |
| **CREDITS: 30** | **FHEQ LEVEL: 4** | **HECOS CODE(S) [max 3]: F720** |
| **PRE-REQUISITES:** | **CO-REQUISITES:** | **COMPENSATABLE: N** |
| **SHORT MODULE DESCRIPTOR:** | | |

This module provides an introduction to aspects of Earth observation and measurement critical to those required to engage in practical hydrography. Basic geodesy, together with Earth observation using satellites and acoustics are studied, together with an introduction to the principles of horizontal and vertical positioning.

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
To introduce the student to the basic principles and techniques relating to Earth observation, measurement and sensors.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Apply the basic theories in geodesy to hydrography operations<br>2. Demonstrate an understanding of satellite positioning and remote sensing, with its limitations<br>3. Apply basic acoustic theory to the operation of survey equipment<br>4. Use horizontal and vertical positioning theories and techniques to demonstrate an understanding of how a vessel or object is located within a positioning framework | LOs 1&2. The main principles of satellite positioning and remote sensing, together with some key limitations are identified.<br><br>LOs 3&4. A knowledge of acoustic basics and sensors is demonstrated, and horizontal and vertical positioning techniques are explained. |

| | |
|---|---|
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 06/2013 | **SCHOOL/PARTNER:** MLA |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content**

An introduction to geodesy, together with satellite remote sensing, principles and sensors. Introduction to underwater acoustics including wave propagation, spreading loss and transducers. Horizontal and vertical positioning theory and techniques.

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Lectures (on-line) | 130 | Indicative figures for distance learning |
| Tutorials ad formative assessment (on-line) | 15 | Indicative figures for distance learning |
| Practical work (on-line) | 10 | Including remote sensing data processing and presentation, positioning applying theory |
| Directed Self-Study, personal development planning and completion of summative assessment | 155 | Reading and associated study leading to assessment. |
| **Total** | **300** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Geodesy & Satellite Positioning<br>Acoustics and Positioning | 35%<br>65% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Geodesy & Satellite Positioning<br>Acoustics and Positioning | 35%<br>65% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD**. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD104** | **MODULE TITLE: Maritime Studies for Hydrography** | |
| **CREDITS: 30** | **FHEQ LEVEL: 4** | **HECOS CODE(S) [max 3]: F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
A study of ships and ship behaviour provides an underpinning knowledge of platform behaviour and the effects this may have on the planning and conduct of a survey. An introduction to the extent and nature of the marine environment, and current resource and policy issues is combined with further development in research methods.

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to develop in the student an appreciation of the effects of ship motion and behaviour. The exploitation and management of marine resources are explored, together with further development of the student's research and study skills.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. To demonstrate an understanding of the behaviour of floating platforms at sea, and consider the effects on survey activities<br>2. Demonstrate an awareness and understanding of the key current issues in marine management, including the legal, social, and environmental implications<br>3. Manage information appropriately and display the research and writing skills necessary to complete an undergraduate programme successfully | |
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 11/2014 | **SCHOOL/PARTNER: MLA** |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content:**
An underpinning knowledge of vessel platforms and ship behaviour. An introduction to marine zones, coastal and marine policy, issues requiring management in the marine environment, renewable and non-renewable marine resources, and coastal zone management. Research methods.

| **SUMMARY OF TEACHING AND LEARNING *[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Lectures (on-line) | 130 | Indicative figures for distance learning |
| Tutorials ad formative assessment (on-line) | 15 | Indicative figures for distance learning |
| Practical work (on-line) | 10 | Including ship stability and dynamics |
| Directed Self-Study, personal development planning and completion of summative assessment | 155 | Reading and associated study leading to assessment |
| **Total** | **300** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Ship Behaviour<br>Law of the Sea and Managing Marine Environment | 35%<br>65% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Ship Behaviour<br>Law of the Sea and Managing Marine Environment | 35%<br>65% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD105B** | **MODULE TITLE: Practical Techniques in Hydrography 1** | |
| **CREDITS: 20** | **FHEQ LEVEL: 4** | **HECOS CODE(S): F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: Y** |

**SHORT MODULE DESCRIPTOR:**
This module will allow the student to develop their understanding of physical processes and gain competence in the basic mathematics and practical techniques required to operate as a hydrographic surveyor. Classroom-based tuition is blended together with applied sessions covering essential skills in positioning and data collection.

| **ELEMENTS OF ASSESSMENT** | | | | | |
|---|---|---|---|---|---|
| **E1** (Examination) | N/A | **C1** (Coursework) | 100% | **P1** (Practical) | **Pass/Fail** |
| **E2** (Clinical Examination) | N/A | **A1** (Generic assessment) | N/A | | |
| **T1** (Test) | N/A | **O1(online open book assessment)** | N/A | | |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to explain and apply the basic mathematical and statistical techniques required to collect and process data to published standards. A key aspect of this module is the development of a student's applied skills in planning, collecting, and processing data relevant to hydrographic surveys.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Apply the basic mathematical techniques required to work effectively with hydrographic data<br><br>2. Conduct a range of basic survey tasks both ashore and afloat working as part of a small team<br><br>3. Prepare and present data in the form of a scientific report | A broad understanding of the underpinning mathematical and scientific principles to undertake hydrographic work.<br><br>A fundamental practical understanding of the equipment and processes used to conduct hydrographic surveys and the analysis and reporting of related data<br><br>Communicate the results of their scientific and technical work accurately and reliably, and with structured and coherent arguments |

| | |
|---|---|
| **DATE OF APPROVAL**: 25/01/2018 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 25/01/2018 | **SCHOOL/PARTNER:** MLA College |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes:<br>Practical competencies had been assessed as an A1 element of assessment on the previous version of this module and attributed to a numerical grade. Discussion highlighted that this is more accurately represents the new P1 element of assessment and suits a pass/fail measurement of the competencies being assessed. This module therefore reflects this amendment to the previously coded EHYD105a (May 2015, Ross Pomeroy) The mathematics element has become a formative assessment to encourage cooperation and teamwork and establishing mathematics as an enabler to the applied learning and skills. | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**ummary of Module Content**

ıpplied mathematics and statistical techniques for surveyors. Revision and refresher in key survey principles together with opportunities to undertake data collection, and data processing. An introduction to applied survey techniques including control methods, precise positioning, acoustic data collection and application of environmental data.

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Scheduled: Online Lectures | 50 | Indicative figures for distance learning practical preparation and planning |
| Scheduled: Classroom lectures; Teaching sessions ashore and afloat | 80 | Mathematics, safety, teamwork, and survey techniques using a range of survey equipment. Including assessed practical competencies and skills |
| Independent | 70 | Reading and summative assessment preparation |
| **Total** | **200** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Mathematics and scientific report | 100% |
| Practical | Practical competencies | Pass/Fail |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Mathematics and scientific report | 100% |
| Practical | Practical competencies | Pass/Fail |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD201** | **MODULE TITLE: Meteorology and Oceanography** | |
| **CREDITS: 30** | **FHEQ LEVEL: 5** | **HECOS CODE(S): F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
All hydrographic surveyors require an in-depth understanding of the environment in which they operate. This module enables the student to acquire the knowledge and understanding of the key aspects of meteorology and oceanography, together with the opportunity to develop their practical skills in data analysis and presentation.

| **ELEMENTS OF ASSESSMENTS** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to provide the student with the knowledge and understanding of the underpinning meteorology and oceanography theories required to operate successfully as a hydrographic surveyor.

**ASSESSED LEARNING OUTCOMES**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Analyse a synoptic chart and available weather information, and account for the effects this may have on the conduct of a hydrographic survey<br>2. Demonstrate knowledge of key concepts relating to physical oceanography, including waves and tides<br>3. Reproduce common oceanographic profiles and account for changes within and between them<br>4. Discuss the complications encountered in nearshore and shallow water environments such as estuaries, beaches and deltas. | |

| | |
|---|---|
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 06/2013 | **SCHOOL/PARTNER:** MLA |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content**
Basic concepts in atmospheric and ocean physics. Interpreting synoptic charts for temperate latitudes and a study of tropical meteorology. The effect of meteorology on sensors and sensor performance. In oceanography, oceanic domains and seabed types are followed by water column properties and behaviour, waves and tides, and shallow water domains.

| **SUMMARY OF TEACHING AND LEARNING *[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Lectures (on-line) | 100 | Indicative figures for distance learning |
| Practical work (on-line) | 20 | Including meteorological and oceanographic data analysis and presentation |
| Directed and self-study, summative assessment & professional portfolio | 160 | Reading and associated study |
| Personal development planning | 20 | |
| **Total** | **300** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Meteorology<br>Oceanography | 40%<br>60% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Meteorology<br>Oceanography | 40%<br>60%<br>100% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD202** | **MODULE TITLE: Data Management and Charting** | |
| **CREDITS: 30** | **FHEQ LEVEL: 5** | **HECOS CODE(S): F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
This module will allow the student to develop their understanding of instrumentation, of errors and uncertainty, and the techniques necessary to quantify them. Study of the visualisation and presentation of data including, for example, digital mapping and Geographic Information Systems (GIS), together with the use of appropriate software, will enable the student to undertake further practical field training with confidence

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to provide the data management and analysis tools to enable the student to quantify errors and uncertainty. Evaluation, presentation and visualisation of data for a variety of purposes, including charting are explored in detail.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Describe, interpret and apply appropriate data management, analytical, quality control and statistical techniques<br>2. Appraise the function, specifications and limitations of hydrographic equipment<br>3. Visualise and present data using manual methods and appropriate ICT<br>4. Appreciate the nature of common errors and evaluate uncertainty | |

| | |
|---|---|
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 03/2016 | **SCHOOL/PARTNER:** MLA |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content**

Data collection and analysis, including errors, statistical techniques, data management and uncertainty. Hydrographic survey equipment. Visualisation and presentation of data including, for example, digital mapping and Geographic Information Systems.

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Lectures (on-line) | 160 | Indicative figures for distance learning |
| Practical work (on-line) | 20 | Including data presentation and evaluation |
| Directed and self-study, summative assessment and personal development planning | 120 | Reading and associated study leading to assessment |
| **Total** | **300** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Sensors, data collection and processing<br>Data management, errors and uncertainty | 40%<br>60% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Sensors, data collection and processing<br>Data management, errors and uncertainty | 40%<br>60% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD.** *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD203** | **MODULE TITLE: Hydrography in Practice** | |
| **CREDITS: 40** | **FHEQ LEVEL: 5** | **HECOS CODE(S): F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: N** |

**SHORT MODULE DESCRIPTOR:**
This module enables the student to pursue a largely self-directed course of study in an area of particular personal or professional interest. Following an introduction to all the topic areas suggested by the published professional body guidelines, the student will have the opportunity to develop and complete a major project.

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to allow the student to develop their academic and research skills, as well as their applied subject knowledge through the detailed investigation of a particular topic of interest and professional relevance.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Plan, undertake and manage a literature-based investigation in an appropriate topic<br>2. Demonstrate a detailed knowledge of the chosen topic subject area<br>3. Write a scientific report and reflect critically on own learning and progress, including professional and employment related skills | |

| | |
|---|---|
| **DATE OF APPROVAL**: 01/2013 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 11/2016 | **SCHOOL/PARTNER:** MLA |
| **DATE(S) OF APPROVED CHANGE:** | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content:**

An introduction to potential areas of focus, including nautical charting, port management, coastal engineering, inland waters hydrography, seismic surveying, offshore construction and military hydrography. A review of research methods, and an introduction to project planning

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information)** |
| Lectures (on-line) | 130 | Indicative figures for distance learning |
| Formative Assessment | 20 | Tutor-led |
| Directed and self-study, summative assessment and personal development planning | 250 | Reading and associated study leading to assessment |
| **Total** | **400** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Survey Planning<br>Scientific report | 50%<br>50% |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Survey Planning<br>Scientific report | 50%<br>50% |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |

**UNIVERSITY OF PLYMOUTH MODULE RECORD**

**SECTION A: DEFINITIVE MODULE RECORD**. *Proposed changes must be submitted via Faculty/AP Quality Procedures for approval and issue of new module code.*

| | | |
|---|---|---|
| **MODULE CODE: EHYD204B** | **MODULE TITLE: Practical Techniques in Hydrography 2** | |
| **CREDITS: 20** | **FHEQ LEVEL: 5** | **HECOS CODE(S): F720** |
| **PRE-REQUISITES: None** | **CO-REQUISITES: None** | **COMPENSATABLE: Y** |

**SHORT MODULE DESCRIPTOR:**
This module will enable students to undertake hydrographic survey tasks on a variety of scales using commonly available survey equipment. A significant amount of applied survey work will be undertaken allowing the development of skills in operational hydrography together with data processing and presentation using industry standard software.

| **ELEMENTS OF ASSESSMENT** | |
|---|---|
| **C1** (Coursework) | 100% |

**SUBJECT ASSESSMENT PANEL to which module should be linked**: MLA

**Professional body minimum pass mark requirement:** N/A

**MODULE AIMS:**
This module aims to enable the student to undertake effective hydrographic survey work as an individual and as part of a small team. Students will undertake a series of evolutions including the conduct of survey tasks in a real environment, acquiring, processing and presenting collected data using relevant techniques.

**ASSESSED LEARNING OUTCOMES:**

At the end of the module the learner will be expected to be able to:

| **Assessed Module Learning Outcomes (ALOs)** | **Programme Intended Learning Outcomes (PILOs) contributed to** |
|---|---|
| 1. Use appropriate survey equipment effectively for a variety of survey tasks paying due regard to the equipment limitations | A fundamental practical understanding of the equipment and processes used to conduct hydrographic surveys and the analysis and reporting of related data |
| 2. Conduct hydrographic surveys to required standards working as part of a small team | Work effectively as part of a small hydrographic survey team and be able to manage basic planning |
| 3. Employ appropriate techniques to analyse, process and present the data collected | Critically analyse marine environmental information to support optimum use of hydrographic equipment |

| | |
|---|---|
| **DATE OF APPROVAL**: 25/01/2018 | **FACULTY/OFFICE:** Academic Partnerships |
| **DATE OF IMPLEMENTATION**: 25/01/2018 | **SCHOOL/PARTNER:** MLA College |
| **DATE(S) OF APPROVED CHANGE:** 25/01/2018 | **SEMESTER:** AY |
| **MODE OF DELIVERY:** distance learning | |
| Notes: | |

The previous version of this module had a presentation included within the C1 element of assessment. This new module record pulls the presentation into P1 and attributes it as a pass/fail assessment only. This module provides that amendment to the previously coded EHYD204a (May 2015, Ross Pomeroy) This amendment removes the maths examination and places assessment of mathematics into the coursework element, encouraging cooperation and teamwork. The emphasis is more correctly directed at applied techniques rather than practical descriptors which are more appropriate for training courses.

**SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT**

Items in this section must be considered annually and amended as appropriate, in conjunction with the Module Review Process. Some parts of this page may be used in the KIS return and published on the extranet as a guide for prospective students. Further details for current students should be provided in module guidance notes.

**ACADEMIC YEAR: 2023-24** **NATIONAL COST CENTRE: 111**
**MODULE LEADER: Dr Jaimie Cross** **OTHER MODULE STAFF: Dr Carlos Martins**

**Summary of Module Content:**
Setting up and calibrating equipment. Conduct of detailed survey tasks using positioning equipment and acoustic sensors. Processing and presentation of data using industry-standard software packages.

| **SUMMARY OF TEACHING AND LEARNING** ***[Use HESA KIS definitions]*** | | |
|---|---|---|
| **Scheduled Activities** | **Hours** | **Comments/Additional Information** |
| Scheduled: Online Lectures | 50 | Indicative figures for distance learning practical preparation and planning |
| Scheduled: Classroom lectures; Teaching sessions ashore and afloat | 70 | Mathematics, safety, teamwork and survey techniques using a range of survey equipment in an applied environment. Including assessed practical competencies and skills |
| Independent | 80 | Reading and summative assessment preparation |
| **Total** | **200** | **(NB: 1 credit = 10 hours of learning; 10 credits = 100 hours, etc.)** |

**SUMMATIVE ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework | Individual final report | 100% |
| Practical | Group presentation | Pass/Fail |
| | Practical competencies | Pass/Fail |

**REFERRAL ASSESSMENT**

| **Element Category** | **Component Name** | **Component Weighting** |
|---|---|---|
| Coursework (in lieu of the original assessment) | Individual final report | 100% |
| Practical | Group presentation | Pass/Fail |
| | Practical competencies | Pass/Fail |

| **To be completed when presented for Minor Change approval and/or annually updated** | |
|---|---|
| **Updated by**: Ann Timms<br>**Date:** 30th October 2023 | **Approved by**: Glenn Harris<br>**Date:** 2nd November 2023 |