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: EHYD506B **MODULE TITLE: Advanced Practical Techniques in Hydrography 2**
CREDITS: 20 **FHEQ LEVEL: 7** **HECOS CODE(S): F720**
PRE-REQUISITES: None **CO-REQUISITES: None** **COMPENSATABLE: Y**

SHORT MODULE DESCRIPTOR:
This module will enable students to plan and execute all aspects of a hydrographic survey on a variety of scales paying due regard to legal and commercial requirements. A significant amount of applied survey work will be undertaken, allowing the development of skills in operational hydrography and survey management, and data processing using industry standard software**.**

ELEMENTS OF ASSESSMENT					
E1 (Examination)	N/A	**C1** (Coursework)	**100**%	**P1** (Practical**)**	**PASS/FAIL**
E2 (Clinical Examination)	N/A	**A1** (Generic assessment)	**PASS/FAIL**		
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 provides the opportunity for the student to create an effective, efficient plan for the conduct of a hydrographic survey; then to manage and analyse a challenging practical task as part of a team in a real environment, including processing, presenting and evaluating collected data using relevant techniques.

ASSESSED LEARNING OUTCOMES: (additional guidance below; please refer to the Programme Specification for relevant Programme Intended 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 and conduct hydrographic surveys to an appropriate standard, calibrating equipment where necessary 2. Work as part of a team, developing the ability to lead and manage all aspects of the survey process 3. Process, present and evaluate the gathered data using appropriate methods	Critically assess the suitability of survey techniques against survey specifications and legal requirements Supervise the work of a hydrographic survey team, including planning and making decisions in complex and unpredictable environments Communicate information, arguments and analysis effectively at both a scientific and professional level using 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: Mathematics is now assessed as a coursework element as it underpins hydrographic practice and is most appropriate in an applied context	

Additional Guidance for Learning Outcomes:

To ensure that the module is pitched at the right level check your intended learning outcomes against the following nationally agreed standards

- Framework for Higher Education Qualifications http://www.qaa.ac.uk/docs/qaa/quality-code/qualifications-frameworks.pdf
- Subject benchmark statements https://www.qaa.ac.uk/quality-code/subject-benchmark-statements
- Professional, regulatory and statutory (PSRB) accreditation requirements (where necessary e.g. health and social care, medicine, engineering, psychology, architecture, teaching, law)
- QAA Quality Code https://www.qaa.ac.uk/quality-code

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: 2022-23 **NATIONAL COST CENTRE: 111**
MODULE LEADER: Dr Carlos Martins **OTHER MODULE STAFF: Dr Jaimie Cross**

Summary of Module Content:
Production of a comprehensive survey plan and briefing. Conduct of surveys afloat using acoustic techniques with appropriate management and leadership skills. Processing and evaluation of data using industry-standard software packages. Presentation of results and production of a survey report.

SUMMARY OF TEACHING AND LEARNING ***[Use HESA KIS definitions]***		
Scheduled Activities	**Hours**	**Comments/Additional Information (briefly explain activities, including formative assessment opportunities)**
Scheduled: online Lectures	35	For practical survey preparation, planning and management
Scheduled: classroom lectures; Teaching sessions ashore and afloat; group presentations	80	Maximising hands-on use and assessment of hydrographic survey equipment, ashore and afloat. On survey planning, management and leadership, data collection and analysis. Delivery of survey results as formative and summative presentations.
Scheduled: practical competencies	25	Supervised assessment of student understanding of survey equipment and analysis of real data
Independent	60	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**
Written exam	N/A	N/A
Test	N/A	N/A
Coursework	Production of end of module scientific report	100%
Practical	Presentation Practical competencies	Pass/Fail Pass/Fail
Clinical Examination	N/A	N/A
Generic Assessment	N/A	N/A
Online open book assessment	N/A	N/A

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Written exam	N/A	N/A
Coursework (in lieu of the original assessment)	Production of end of module scientific report	100%
Coursework	N/A	N/A
Practical	Presentation Practical competencies	Pass/Fail Pass/Fail
Clinical Examination	N/A	N/A
Generic Assessment	N/A	N/A
Test	N/A	N/A
Online Open Book Assessment	N/A	N/A

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: MLA College **Date:** 3rd March 2022	**Approved by**: Ross Pomeroy **Date:** 3rd March 2022

Recommended Texts and Sources:

- Lekkerkerk H-J, van der Velden R, Haycock T, Jansen P, de Vries R, van Waalwijk P, Beemster C. (2006) Handbook of Offshore Surveying. Skilltrade, Clarkson Research Services, London
- International Hydrographic Organization's online "Manual on Hydrography" (publication C-13)
- International Hydrographic Organization's online "Standards for Hydrographic Surveys" (publication S-44)
- Journals:

- Hydrographic Journal
- Hydro International
- Sea Technology