General information

Course Title	**Blended Intensive Program:** 3rd Short Course on Marine Data Literacy for graduate and postgraduate students (3 ECTS)
Language of the course	English
BIP Code	2021-1-HR01-KA131-HED-000003747-2
Abstract	● Are you struggling to find and use data proficiently in your project? ● Why do it by trial and error, without getting the full picture, resources and competence? ● If you are seeking to consolidate your skills in applying data and the scientific method in your research and work, then this Marine Data Literacy course is what you need. Join BIP of the SEA-EU Alliance, offered by: University of Split, University of Algarve, University of Brest, University of Cadiz, University of Gdansk, Kiel University, and University of Malta.
Calendar	● **15 September 2023:** Deadline for application ● **October/ November 2023:** Intro lectures (online) ● **02nd December:** Arrival in Split on Saturday to start physical courses ● **03rd December - 09 December 2023:** On-site Intensive Course in Split ● **10th December 2023:** Departure from Split on Sunday
Total number of hours:	30 online +30 in Split
Teacher(s) in charge	23 in total (3 from the UNIST, 10 from other partner universities during the online mode, and 10 from other partner universities during the physical part in Split
Number of participants	5 per university
Mobility costs	Activation of ERASMUS BIP Physical Mobility
<mark>Contact for UG students</mark>	**Recruitment of students from UG** Aleksandra Dudkowska aleksandra.dudkowska@ug.edu.pl

Pedagogical contents

Target group / Expected profil	Graduate and postgraduate students in Marine or Environmental science.
Application	**First step - until September 15, 2023** 1. Recruitment of students from UG – please contact Aleksandra Dudkowska aleksandra.dudkowska@ug.edu.pl 2. Fill in the online application and upload SUPPORT LETTER (written and signed by the professor of your university) & MOTIVATION LETTER. **Second step – after September 15, 2023** 1. Students qualified for the program will be contacted by the UG Erasmus + office to arrange further formalities. 2. Activation of ERASMUS BIP Physical Mobility with the support of the UG Erasmus office.
Learning objectives/outcomes	● Identify different types and formats of available scientific data; ● Understand the basics of data processing and extraction of knowledge from data; ● Understand the basics of coastal resource management ● Use timely delivery of routine, reliable, quality-assured marine data assists in meeting expected standards of environmental monitoring, assessments and management in support of sustainable development; ● Understand how relevant data may be acquired to fit the needs of users such as in fisheries resource assessment and management, water quality monitoring and the general state of health of the sea; ● Give appropriate importance of data to prove theoretical concepts and/or draw scientific conclusions.
Any required material/software to take part in the course	Own laptop
ECTS	3 ECTS
Evaluation	The evaluation of the applicants will be done according to the quality of the applied students, the representation of students with the aim of meeting the criteria of the BIP program, and the equal representation of all alliance partners.
Transcript of records will be issued …	Students will have an online quiz after every lecture. The final mark will be the average of all quizzes.

Structure of the course

Virtual part	October/ November 2023	**Intro lectures:** 1. Introduction to Marine Data 2. Reliable oceanographic data sources: Met-ocean 3. data sets: climate, reanalysis, forecast and in situ data 4. Concepts of Ocean Data Management 5. Online Data Portals 6. Accessing and transforming data 7. Reliable oceanographic data sources: Ocean Remote Sensing: Data source, downloading and software(SNAP) 8. Applying AI to Oceanography 9. Managing and Processing (Big) Scientific Data 10. Introduction to learning algorithms, neural networks and clustering. 11. Applying AI to Oceanography: case studies
Physical part	2nd -10th December 2023	**Practical sessions in Split, Croatia:** 1. Tides: Sea-level time series: detecting processes, stationarity and trends 2. Climate: Reliable oceanographic data sources: Introduction to sea state, wind wave and wind wave climate characterization. 3. Biology / Chemistry: Quality control and visualization data on Ocean Data View 4. Environment: Computing satellite-derived bathymetry in shallow areas in SNAP, QGIS or ArcGIS; From data formats to practical use of water column depth data. 5. Safety, Security / Pollution: Oil Spill Detection from space with SENTINEL-1

Practical information

Accomodation recommandations	Split is a tourist town and you need to look for accommodation in time. There are student dormitories with a limited number of places for foreign students. In order to check whether there is a place available in the Student Dorm on time, contact: ana.cosic@unist.hr
The physical mobility will take place at…	University of Split, University Department of Marine Studies & Faculty of Science, Ul. Ruđera Boškovića 33, 21000, Split
Any tips	To get to know Split more, visit: visitsplit.com