

# Course Specifications

From the academic year 2017-2018 up to and including the

## Data and Information Management (C003443)

Course size (nominal values; actual values may depend on programme)

Credits	4.0	Study time	120 h	Contact hrs	45.0 h
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Course offerings and teaching methods in academic year 2018-2019

A (year)	English	lecture	20.0 h
		seminar: coached	25.0 h
		exercises	

Lecturers in academic year 2018-2019

Deprez, Tim	WE11	lecturer-in-charge
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Offered in the following programmes in 2018-2019

	crdts	offering
<a href="#">International Master of Science in Marine Biodiversity and Conservation</a>	4	A

Teaching languages

English

Keywords

Information management, data managementmanagement, data formats, metadata, datasets, derived products, appropriate software, relational databases

Position of the course

To discuss the importance of data- and information management for marine and lacustrine sciences. To give an overview of state-of-the-art principles, practices and networks in a global context. To illustrate the relevance of good data and information management for the production of derived products for the support of research and policy. To get the basic understanding of designing a proper relational database for supporting a research project.

Contents

Introduction to data- and information management in marine and lacustrine sciences. The participants get an overview of what data- and information management implies, and an introduction to some tools which are often used for information management. The topics handled in this course are:

1. Data and information in global oceanography today (Collecting data, Research oceanography, Survey oceanography, Operational oceanography , International programs, agencies & organizations)
2. Information technology & scientific communication (Computer technologies, Metadata, Information seeking in electronic environments, Information & technology programs & organizations)
3. Information management principles (concepts, relational databases, data centres)
4. From research proposal to derived products (data policies, data protocols, databases, distribution of data),
5. Hands on exercises (both in IODE project office, MSaccess and database design at University)

Initial competences

Basic biology, geology, chemistry, physics basic computing skills

Final competences

- 1 The participant should have insight in the relevance of data- and information management.
- 2 They should be able to find and integrate information and data from several sources, and use this to generate reports, both for the benefit of policy makers and for other scientists.

#### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

#### Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Lecture, seminar: coached exercises

#### Extra information on the teaching methods

Lectures, practical exercises and discussions; visit to the IOC Project Office for IODE in Ostend

#### Learning materials and price

Cost: 0.0 EUR Syllabus, lecture notes, handouts of ppt files, articles.

#### References

Recommended literature is available in OceanPortal's digital library at <http://ioc.unesco.org/oceanteacher/oceanteacher2/DigitalLibrary.htm>

#### Course content-related study coaching

Teacher is available for questions, and help, extra material will be posted online.

#### Evaluation methods

end-of-term evaluation

#### Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions, oral examination, assignment

#### Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions, oral examination, assignment

#### Examination methods in case of permanent evaluation

#### Possibilities of retake in case of permanent evaluation

not applicable

#### Extra information on the examination methods

Summary report by each student, to be discussed at examination. Short written exam with possibility of oral defence.

#### Calculation of the examination mark