

Marine Biology

Philippe Dubois

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Who I am

- Research Director FNRS
- Prof. at ULB
- Head of the ULB Marine Biology Laboratory
- Main research topics:
 - Ecophysiology of benthic organisms in the context of global change (impact of ocean acidification and warming, increased hydrodynamism)
 - Relations between properties and function of the skeleton of marine organisms (morphology, biomechanics)

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Contact

- E-mail: phdubois@ulb.ac.be (preferred)
- UC5.149 (please phone before)
- 02 650 28 39

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Teaching supports

On lab website: <http://biomar.ulb.ac.be/teaching/ulb/marine-biology-biol-f-417/>

- Syllabus
- Slides of the course

Books

- At the « Bibliothèque des Sciences et Techniques »
- Both ULB and VUB students have access (for the latter, contact the desk in the library)
- Advanced course: not covered by a single book, even not by multiple ones; several parts based on original scientific literature
- « Framework »: Valiela I. 2015. Marine Ecological Processes. Springer (on line version available).

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Books

- « Framework »: Valiela I. 2015. **Marine Ecological Processes**. Springer.
- Thurman HV. 1990. **Essentials of oceanography** 3rd ed. Columbus, Ohio : Merrill Pub. Co
- Segar DA 2007. **An introduction to ocean sciences 2nd edition**. Minneapolis/St. Paul, MN: West Pub.
- Levinton JS 1995. **Marine biology : function, biodiversity, ecology**. New York : Oxford University Press 420 p.
- Sheppard Ch 2000. **Seas at the millennium : an environmental evaluation** New York : Pergamon
- Steele, John H.2001 **Encyclopedia of ocean sciences vol 1-6**

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English

- Taught in English but
 - Most of us are not native speakers
 - Not an English language course
 - Do not hesitate to ask questions (rather small audience)
- Exam
 - In English (preferred)
 - But you have the right to have it in French (ULB students) or in Dutch (VUB students) (NB: Tropimundo in English, mandatory)

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Structure of the course

Theoretical lessons

- General oceanography (MK)
- Pelagic biological processes (PhD)
- Benthic biological processes (PhD)
- Case study: the Southern Ocean (PhD)
- Case study: Coral reef ecology (MK)
- Global change in the ocean (PhD)
- Connectivity of populations (MK)

Excursion, practicals

- Excursion: sampling benthic organisms (MK)
- Practical:
 - Data analysis of excursion: characterizing biodiversity (MK)
 - Constraints on intertidal algae (PhD)

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The course within your Master

- Marine Biology does not stop at the end of the course!
- Depending on your cursus further excursions during your Master on temperate or tropical shores: you'll need what you learned in this course!
- (ULB MA-BIOR A-D: BIOL-F-416 Stage de Biologie marine)

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