

Estuarine and Coastal Systems

2025 - 2026

Is part of the next programmes:

- M0037000 Master of Science in Marine and Lacustrine Science and Management
- M0047002 Master of Biology: Global Change Biology
- M0047001 Master of Biology: Biodiversity, Conservation and Restoration
- U0001008 Courses open to exchange students in Sciences

Course Code:	2001WETEST
Study Domain:	Biology
Semester:	1E SEM
Contact Hours:	48
Credits:	4
Study Load (hours):	112
Contract Restrictions:	Exam contract not possible

Language of Instructions:	ENG
Lecturer(s):	<div>T Stijn Temmerman</div> <div>C Jean-Philippe Belliard</div> <div>C Tom Van der Stocken</div>
Examperiod:	exam in the 1st semester

1. Prerequisites *

speaking and writing of:

- English

specific prerequisites for this course

Basic knowledge of ecology and earth sciences

2. Learning outcomes *

- The aim of the course is to get insight into the ecological processes and structures of estuaries and coasts (covering beaches, tidal flats, tidal marshes, dunes and rocky shores).
- The students learn to recognize and investigate these processes and structures during a fieldcourse.

3. Course contents *

The course starts with a summary of the physical and chemical processes of estuaries and coasts such as water movement, sediment transport and biogeochemistry. Then the different biological components are discussed, starting with the primary producers (plants and algae), consumers (benthos, zooplankton) and the higher trophic levels (fishes and birds). Special attention is given to

interactions between different groups of organisms. Finally a chapter is devoted to the human impact on estuaries and coasts.

Additional to the lectures, a series of field excursions are organized in the Scheldt estuary, to demonstrate ecosystem structures and functioning, and field techniques for estuarine ecological studies.

4. International dimension *

- This course stimulates international and intercultural competences.
- Students use course materials in a foreign language.
- Students compare the course contents in an international context.
- Students work together (online) with international students.

5. Teaching method and planned learning activities

5.1 Used teaching methods *

Class contact teaching

- Lectures

Personal work

Assignments

- Individually
- Excursions

5.2 Planned learning activities and teaching methods

Attendance to the practical trainings and excursions is compulsory. Illegitimate absence of one or more practical trainings/excursions will automatically lead to the

mention “absent” for the entire part of practical trainings/excursions and exclusion from any practical training exam. This exam can only be redone the next academic year (after attendance of all practical training(s)). In that case the student will be allowed to take the theoretical examination and can receive a partial exemption if he/she passes. However, the student will not receive a mark before completing all practical trainings and completing the entire exams.

5.3 Facilities for working students *

Classroom activities

- no specific facilities

6. Assessment method and criteria *

6.1 Used assessment methods *

Examination

- Written examination without oral presentation

Other assessment methods

- Written assignment

6.2 Assessment criteria *

Attendance to the practical trainings and excursions is compulsory. Illegitimate absence of one or more practical trainings/excursions will automatically lead to the mention “absent” for the entire part of practical trainings/excursions and exclusion from any practical training exam. This exam can only be redone the next academic year (after attendance of all practical training(s)). In that case the student will be allowed to take the theoretical examination and can receive a partial exemption if he/she passes. However, the student will not receive a mark before completing all practical trainings and completing the entire exams.

7. Study material

7.1 Required reading *

The powerpoint slides that are discussed during the lectures + the oral explanations of the teachers to the slides, form together the essential study material. The slides are made available to the students through the Blackboard online teaching platform.

Additionally, text materials, in the form of extracts from books and articles, are made available using the same platform. The text materials form the background information.

7.2 Optional reading

The following study material can be studied voluntarily :

-

8. Contact information *

Prof. Stijn Temmerman

Campus Drie Eiken, Building C, first floor, room C1.20

stijn.temmerman@uantwerpen.be

+32 32652313

9. Tutoring

The teacher is available for further questions.