Course Specifications
Valid as from the academic year 2019-2020

Sustainable Development in Production and Consumption Systems
I002434

Course

Valid as from the academic year 2019-2020

Course Specifications

Course offerings and teaching methods in academic year 2019-2020

A (semester 1) Dutch

- Group work: 15.0 h
- Guided self-study: 5.0 h
- Lecture: plenary exercises: 5.0 h
- Lecture: 25.0 h

Lecturers in academic year 2019-2020

Nevens, Frank LA21 lecturer-in-charge
Dewulf, Jo LA24 co-lecturer

Offered in the following programmes in 2019-2020

Bachelor of Science in Bioscience Engineering (main subject Agricultural Sciences) 5 A
Bachelor of Science in Bioscience Engineering (main subject Cell and Gene Biotechnology) 5 A
Bachelor of Science in Bioscience Engineering (main subject Chemistry and Food Technology) 5 A
Bachelor of Science in Bioscience Engineering (main subject Environmental Technology) 5 A
Bachelor of Science in Bioscience Engineering (main subject Forest and Nature Management) 5 A
Bachelor of Science in Bioscience Engineering (main subject Land and Water Management) 5 A
Joint Section Bachelor of Science in Bio-Engineering 5 A

Teaching languages

Dutch

Keywords

Sustainable development, systems thinking, transitions, production and consumption systems, sustainability assessment

Position of the course

Considering the societal relevance, this course makes the concept of ‘sustainable development’ more clear and workable; with the ultimate aim of effective realizations in the specific work of bioscience engineers.

Contents

- Sustainable development - global framework
- Sustainable development - systems thinking
- Sustainable production and consumption systems
- Sustainability assessment

Initial competences

No prior knowledge is required.

Final competences

1 Students know the concept of ‘sustainable development’ and its meaning in a global context; as well as the consequences for local situations.
2 Students acknowledge the importance of systems thinking for sustainable development and they are able to frame a specific sustainability issue in the context of a socio-technical system.
3 Students can image a production and consumption system; and locate and interrelate diverse loci and issues of (un)sustainable development.
4 Students know the essentials (content and process wise) of a number of sustainability assessment tools.
5 Students can assess their own life styles based on principles of sustainable development; and they know how to adapt them to become more sustainable.
6 The students are capable to communicate on a specific topic of sustainable development, in a way that is underpinned, thoughtful, clarifying and activating.

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
Guided self-study, group work, lecture, lecture: plenary exercises

Extra information on the teaching methods
Part of the ‘theoretical’ knowledge is transferred in a flipped classroom setting; short videoclips are available online, the practical consequences are subsequently dealt with in class.
The group work should inspire creative yet correct dealing with available – scientific-information on specific issues of sustainability.

Learning materials and price
There is a concise syllabus (15 EUR) and there are online movieclips (free).

References
Rich scientific literature and results of own research.

Course content-related study coaching
The syllabus and the classes are complemented by online movieclips and handed out essential literature.
The group work on a sustainability issue in a strong scientific-communicative format is accompanied by experts on the matter.

Evaluation methods
end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions, assignment, peer assessment

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
not applicable

Calculation of the examination mark
Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.

(Approved)