

The Rhine-Waal University of Applied Sciences in Kleve and Kamp-Lintfort offers an innovative, international environment combined with first-rate teaching in interdisciplinary Bachelor and Master's degree courses, taught mainly in English. It is strong in conducting research in disciplines such as technology, natural sciences and social sciences. More than 7,000 students have already enrolled at the Rhine-Waal University of Applied Sciences.

The University of Applied Sciences has to award for the faculty Life Sciences in the Bachelor's degree courses Sustainable Agriculture, B.Sc. at the campus in Kleve in the winter term 2021/2022 the following

# Lectureship (freelance teaching position)

within the meaning of Section 43 of the Law regarding the Universities in the State of North Rheine-Westphalia (HG NRW):

#### Reference number 17/LA/21

Subject area/Module: "Basics of biology and agroecology I - Agroecology I "

The lecturer shall take over lecture in the amount of 3 lecturing hours (2 hours lecture + 1 hours practical training) in the English module "Basics of biology and agroecology I – Part Agroecology I " (1st semester) of the bachelor course Sustainable Agriculture, B.Sc..

## **Teaching contents**

Basics, terms and concepts of cell biology (plant and animal cells and their components); fundamental genetics for breeding (molecular basis, inheritance, mutations, polyploidy); basics of zoology; terms, definitions, principles and concepts of ecology and agroecology; global cycles of matter; population and community ecology; foodwebs, habitat and niche; disturbance and succession; diversity and stability of agroecosystems; interactions in cropping systems; sustainable agroecosystems; basics of biological and agroecological experimentation and data documentation; introduction to scientific working

# Learning objectives

On successful completion of this module, students should

- know the relevant definitions, principles and concepts of cell biology, genetics and zoology<sup>1</sup>
- know the relevant definitions, principles and concepts of ecology and their application in agriculture<sup>1</sup>
- know how populations and communities of organisms in agroecosystems react to their environment<sup>1</sup>
- be able to relate their knowledge in biology and ecology to its relevance in sustainable agriculture<sup>2</sup>
- be able to partly apply methods of biology and agroecology<sup>3</sup>

- be able to present and document results and findings in a scientifically appropriate format<sup>4</sup>
- be able to analyse how their findings are related to those of others<sup>4</sup>
- be able to evaluate the application of ecological principles and concepts in sustainable agricultural systems<sup>5</sup>
- be able to critically discuss possibilities and shortcomings of agroecology in the existing agricultural context<sup>5</sup>

<sup>1</sup>Knowledge; <sup>2</sup>Comprehension; <sup>3</sup>Application; <sup>4</sup>Analysis; <sup>5</sup>Synthesis and judgement

## Requirements:

The lecturer shall have a corresponding university degree and have practical experience. Didactic skill and the ability to hold the course with an international group of students in the English language are required (the language level shall be C1 according to the European reference framework).

The Rhine-Waal University of Applied Sciences offers lectures a systematic networking with the university as well as the opportunity of a specific training development to ensure a sustainable skill improvement, a closely link between theory and practice and a support for the personal development of lectures.

Please send your application via e-mail stating the reference number and the module title addressed to

# **Contact person:**

Prof. Dr. Florian Wichern

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For questions and further information please contact the mentioned contact person above.