COURSE DETAIL

ECOLOGICAL ASPECTS OF BIO-INTERACTIONS
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences Agricultural Sciences
UCEAP Course Number 100
UCEAP Course Suffix
UCEAP Official Title ECOLOGICAL ASPECTS OF BIO-INTERACTIONS
UCEAP Transcript Title BIOINTERACTIONS
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description
The course focuses on bio-interactions between invertebrates (arthropods, nematodes), micro-organisms and plants, and beneficial organisms and pathogens and their hosts in natural and agro-ecosystems. The major themes covered in the lectures include biodiversity, interaction and communication between organisms (including different trophic levels), fundamental mechanisms underlying bio-interactions, and ecosystem services. Students concentrate on intraspecific and interspecific interactions and apply this knowledge to explore, monitor, and evaluate agro-ecosystem management strategies using biodiversity principles, often referred to as functional biodiversity. After successful completion of this course, students are able to understand and predict the responses and interactions of individual organisms, communities, and ecosystems; explore, develop, and evaluate management strategies and practices that enable and ensure the sustainable use of natural resources and conservation of biodiversity; manage the interactions between crops, (parasitic) weeds, insects, bacteria, fungi, viruses, and nematodes at different trophic levels; strengthen the inherent quality of agro-ecosystems in preventing pest and disease development by using genetic control, cultural control, biological control, and other biorational options; and execute a research project.

Language(s) of Instruction
English

Host Institution Course Number
ENT-30306

Host Institution Course Title
ECOLOGICAL ASPECTS OF BIO-INTERACTIONS

Host Institution Course Details

Host Institution Campus
Biology

Host Institution Faculty

Host Institution Degree

Host Institution Department
Entymology

Course Last Reviewed

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