Course Unit Descriptor

Study Programme: Soil, plant and genetics
Course Unit Title: Climate change and extreme weather events
Course Unit Code: 19.ZB9001
Name of Lecturer(s): prof. dr Branislava Lalić
Type and Level of Studies: Master Academic Studies
Course Status (compulsory/elective): compulsory
Semester (winter/summer): winter
Language of instruction: English
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 5
Prerequisites: Meteorology course at undergraduate studies
Course Aims: Gain knowledge about climate change (CC) and extreme weather events (EWE), its prediction and effects
Learning Outcomes: Students should aknowledge differences and feedbacks between CC and EWE, mitigation measures and EWE adaptation measures which can be used in every day practice.
Syllabus: *Theory* Climate changes. Climate classification and regionalisation. CC physical backgound. CC impact on agriculture. CC adaptation in agriculture. CC mitigation measures in agriculture. EWE. Definition and probability of drought, heat vawes, frost, hail, flooding and extreme precipitation. Early warning systems in agriculture. Risk assessment and management. Adaptation and mitigation. NDVI application *Practice* Individual practical work
1. **Required Reading:** Lalic, B., Eitzinger, J., Dalla Marta, A., Orlandini, S., Firanj Sremac, A., Pacher, B. (2018) Agricultural Meteorology and Climatology, Firenze University Press, Florence, p.354, ISBN 978-88-6453-795-5, http://www.fupress.com/archivio/pdf/3808_16282.pdf

Weekly Contact Hours: 5	**Lectures: 3**	**Practical work: 2**

Teaching Methods:

Lectures, discussion, mentored individual research work

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	0	written exam	
Practical work	49	oral exam	51