Tárgytematika / Course Description

Principles of Agrometeorology

MENB_VKTA002

Tárgyfelelős neve / Teacher's name: dr. Varga Zoltán
Félév / Semester: 2020/21/1
Beszámolási forma / Assesment: Vizsga
Tárgy heti óraszáma / Teaching hours(week): 2/1/0
Tárgy féléves óraszáma / Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The course Agrometeorology focuses on working of the complex environmental system from an applied meteorological aspect. The agricultural production is basically and permanently influenced by atmospheric conditions, that is the reason why it is essential to study, to collect data and to give information about weather and climate and their impacts.

After finishing the course successful students will be able to recall the basic concepts of this scientific field, to describe the most important relationships between atmosphere and crops, to integrate the new knowledge about agrometeorological issues with older environmental knowledge and to assess the value of up-to-date information about this scientific area.

TANTÁRGY TARTALMA / DESCRIPTION

Content of the lectures:

Week 1: The history and the importance of agricultural meteorology

Week 2: Principles of the relationship between atmosphere and agricultural production

Week 3: The impact of the composition of atmosphere on crops

Week 4: The impact of radiation on crops

Week 5: The impact of temperature on crops

Week 6: The impact of humidity elements on crops

Week 7: The impact of extreme meteorological values on crops

Week 8-9: Climatic classification systems for agriculture

Week 10-11: Agroclimatic characterization of Hungary

Week 12-13: Possible modification of meteorological conditions

Week 14: Up-to-date questions of agricultural meteorology

Practical lessons focus on practical use of agrometeorological information.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Students must attend the weekly lectures as well as practical lessons. No more than 25% of the lectures and practical sessions are allowed to be missed for any reason. Extra lectures may not be provided for missed sessions.

Type of the exam: oral examination with theoretical and practical questions. There is no possibility for pre-exam. All topics will be discussed in the exam.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Compulsory reading:

Varga-Haszonits Z. – Varga Z. (2020): Principles of agrometeorology. Lecture notes, Mosonmagyaróvár.

Varga-Haszonits Z. – Varga Z. (2020): Agrometeorological practices. Lecture notes, Mosonmagyaróvár.

(These lecture notes are the English version of the original lecture notes used by Hungarian students.)

Recommended literature:

Behringer. W. (2009): A Cultural History of Climate. John Wiley and Sons, New Yersey. (ISBN: 978-0-7456-4529-2)

Hartmann, D.L. (1994): Global physical climatology. Academic Press. (ISBN 0-12-328530-5)