Course Unit Descriptor

Study Programme: ORGANIC AGRICULTURE

Course Unit Title: ORGANIC FIELD CROPS PRODUCTION

Course Unit Code: 19.ORG014

Name of Lecturer(s): Assoc. Prof. Goran Jacimović

Type and Level of Studies: UAS

Course Status (compulsory/elective): compulsory

Semester (winter/summer): WS

Language of instruction: ENG

Mode of course unit delivery (face-to-face/distance learning): face-to-face

**Number of ECTS Allocated: 5** 

Prerequisites: General filed crops, Soil science and fertilizers, Agricultural engineering

## **Course Aims:**

The aim of the course is that students learn how in organic farming systems, in a given agro-ecological conditions, achieve high and stable yields, with the production of high quality demanded in the market of healthy food and organic products. The following crops suitable for organic growing in our country will be studied: wheat, spelt, barley, oats, rye, triticale, maize, millet, buckwheat, soybeans, beans, lentils, chickpeas, sunflower, flax and hemp seed, potatoes, sugar beet, mustards, tobacco and hops. Special emphasis in growing technology of every species will be given to respect the basic principles of organic production with long-term maintenance of soil fertility, using primarily preventive and integrated agro-technical measures.

## **Learning Outcomes:**

After completion of lectures and exercises were student will be introduced with the basic elements of growing technology of main field crops on the principles of organic production. After passing the exam, the candidate will be qualified to lead the organic field production, and to be successful in this production. Will be trained to combine the knowledge, ability and skill with the given environmental and edaphic conditions.

## **Syllabus:**

Theory: In the introductory part of the course students will be introduced with the definitions, assumptions, goals and tasks of successful organic, especially field crops organic production. At the leading field crops species (the most abundant in the fields of Vojvodina and Serbia) will be given review of their economic and nutritional importance and possibilities of the use, geographical origin, the history of culture, geographical distribution and areas and yields in the world and in Serbia. At selected plant species will be studied biological characteristics and requirements for growing conditions in the vegetation and phenological stages, as well as the basic elements of production technology based on the principles of organic farming; crop rotation, tillage and seedbed preparation; fertilization (manner, time, amount of nutrients allowed in this type of production); sowing (varieties and hybrids, seed quality and seed preparation, time and method of sowing, sowing depth); crop care (fight against weeds, pests and diseases, with emphasis on preventive and mechanical measures of control); harvest (physiological and technological maturity, moment and way of harvesting, processing and storage). Through the presentation of production technology will constantly emphasize the role and importance of timely and quality performance of all agro-technical measures and the possibility of rationalization of production processes using the latest achievements of science and practice.

*Practice:* On the exercises, students will be introduced with the morphology of the above species, the growth stages and development (phenological phases and stages of organogenesis). On the exercises will be presented fresh and dry material and slides and photographs of plants.

# **Required Reading:**

Weekly Contact Hours: Lectures: 3 Practical work: 2

Teaching Methods: Lectures and students group work and consultations

# **Knowledge Assessment (maximum of 100 points):**

Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	30
Practical work	25	oral exam	40
Preliminary exam(s)			
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.