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| **STUDY PROGRAMME:** | **Professional Undergraduate Study Programme Agriculture** *Specific field of study: Plant production, Zootechnics or Management in agriculture* |
| **Course:** | **ORGANIC AGRICULTURE** |
| **Course code: 38141****Course status: elective** | **Semester**: **IV** | **ECTS credits: 4** |
| **Course holder:**  | **Ivka Kvaternjak**, Ph.D., professor of professional studies |
| **Modes of delivery:** | **Number of hours**  |
| Lectures | 30 |
| Excersises, | 18 |
| Seminars | 12 |

**COURSE OBJECTIVES:** To acquaint students with the development, goals and standards in organic agriculture, as well as procedures for adaptation to that method of cultivation and the differences compared to conventional agriculture.

**COURSE CONTENT**

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|  | **Course units**  | **Modes of delivery:** | **Places of delivery** |
| L | E | S |
| 1. | Introduction. Getting to know the program. Prior knowledge of the participants and motivation for choosing the course.  | 2 | - | - | Lecture hall |
| 2. | Basic definitions, goals and basic principles Development of organic agriculture in Croatia, Europe and the world.  | 2 | - | 1 |
| 3. | International organizations and institutions dealing with organic production  | 2 |  | 1 |
| 4. | Biodynamic agriculture, definitions, historical development, cultivation standards and product labeling in biodynamic agriculture | 2 | 2 |  |
| 5. | Preparations in bio-dynamic agriculture, sowing calendar | 2 |  | 1 |
| 6. | Permaculture, definitions, development and expansion. | 2 |  |  |
| 7. | Basic differences between conventional, organic and sustainable agricultural production | 2 |  |  |
| 8. | How to become an organic producer, familiarization with standards in organic agriculture,  | 2 |  |  |
| 9. | Plan for the transition from conventional to organic production | 2 | 10 | 2 |
| 10. | Marking, storage of organic products.  | 2 | 2 | 2 |
| 11. | Organic animal husbandry, herbalism, viticulture, winemaking and beekeeping (standards and transitional period). | 2 | 2 | 2 |
| 12. | Fertilizers and fertilization in organic agriculture. Natural fertilizers, composts, organic mineral fertilizers,  | 2 | - | 1 |
| 13. | Ecological means for improving soil fertility (bistimulators, conditioners), ecologically acceptable preparations for plant protection. | 2 | - | - |
| 14. | Tillage and crop rotation in organic agriculture | 2 | 2 | 1 |
| 15. | The role of organic agriculture in mitigating climate change | 2 | - | 1 | Lecture hall |
|  |  | 30 | 18 | 12 |  |

L=Lectures, E=Excersises, S=Seminars,

**LEARNING OUTCOMES (LO)**

After passing the exam, the student will be able to:

LO 1. Formulate organic agriculture, basic goals and principles

LO 2. Design biodynamic production and permaculture design

LO 3. Compare conventional and organic agriculture

LO 4. Choose organic fertilization and fertilization in biodynamic production

LO 5. Recommend standards for organic and biodynamic production

LO 6. Create a transition plan from conventional to organic agriculture

Course holder:

Ivka Kvaternjak, Ph.D., professor of professional studies

Križevci, July 2024