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| **STUDY PROGRAMME:** | **Professional Undergraduate Study Programme *Agriculture***  Specific field of study: Plant production, Zootechnics or Management in agriculture | |
| **Course:** | MEDICINAL AND AROMATIC PLANTS | |
| **Course code:** 135050  **Course status**: elective | **Semester: III** | **ECTS credits: 4** |
| **Course holder:** | **Renata Erhatić**, Ph.D., professor of professional studies | |
| **Modes of delivery:** | **Number of hours** | |
| **Lectures** | 30 | |
| **Excersises,** | 15 | |
| **Seminars** | 15 | |

**Course objectives:** train participants to be able to independently organize production or advise on the production of medicinal and aromatic plants.

**Course content**

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|  |  | **Modes of delivery:** | **Places of delivery** |
|  | **Course units** | **L, E, S, PT** |
|  | Introduction. The significance of the collection and production of medicinal and aromatic plants | L 2 | Lecture hall |
|  | Active ingredients of medicinal and aromatic plants | L 2 | Lecture hall |
|  | Factors affecting the content and quality of active ingredients of medicinal and aromatic plants | L 1 | Lecture hall |
|  | Knowledge of the morphological and biological characteristics of certain families of cultivated medicinal and aromatic plant species: Lamiaceae (lavender, sage, thyme, peppermint, basil, chervil, lemon balm, myrrh, marjoram, rosemary); Asteraceae (chamomile, calendula, wormwood, tarragon, yarrow); Apiaceae (angelica, chives, fennel, coriander, dill, cumin, anise) | L 8  S 5  E 2 | Lecture hall, Testing ground |
|  | Cultivation technology, harvesting and storage of selected families of medicinal and aromatic species of Lamiaceae (lavender, sage, thyme, thyme, peppermint, basil, chervil, lemon balm, myrrh, marjoram, rosemary); Asteraceae (chamomile, calendula, wormwood, tarragon, feverfew); Apiaceae (angelica, lovage, fennel, coriander, dill, cumin, anise), Valerianaceae, Malvaceae (mallow) | L 5  S 5  E 3 | Lecture hall |
|  | Knowledge of the morphological and biological characteristics and the use of selected families of the most important wild medicinal plant species: nettle, dobricica, betonika, immortelle, dandelion, yarrow and others | L 5  E 1 | Lecture hall, testing ground |
|  | Knowledge of morphological and biological characteristics and the use of exotic medicinal plant species (cinnamon, cloves, nutmeg, saffron, vanilla, cocoa, pepper and others | L 5 | Lecture hall |
|  | Processing and storage, distillation process and basic characteristics of the most important essential oils | L 2  E 2 | Lecture hall,  Laboratory |
|  | Knowledge of the characteristics of medicinal and aromatic plant seeds of known commercial medicinal and aromatic species | E 2 | Testing ground |
|  | Seminar papers: selection of a medicinal or aromatic wild plant species according to the student's own choice | S 5 | Lecture hall |
|  | Field lesson: tour of the area for the production and processing of medicinal and aromatic plant species and report from the field lesson | E 5 | Outside of the Križevci University of Applied Sciences,  Lecture hall |
| **In total** | | **60** |  |

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

**Learning outcomes (LO)**

LO 1. Argue the importance and use of medicinal plants

LO 2. To determine the morphological and biological characteristics of the main commercial species of medicinal and aromatic plants

LO 3. Assess the possibility of growing the main commercial species of medicinal and aromatic plants with regard to agro-climatic conditions

LO 4. Choose the application of medicinal and aromatic plants depending on the active substances

Course holder:

Renata Erhatić, Ph.D., professor of professional studies

Križevci, July 2024