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| Course: | *Field and Vegetable Crops Production* |
| Course id: 3ОАЕ1О03 |
| Number of ECTS: 6 |
| Teacher: | Ph.D. Branko Marinkovic; Ph.D. Žarko Ilin; contributors: Ph.D. Goran Jaćimović, M.Sc. Boris Adamović |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 3 | Practical classes: 2 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None/navesti ako ima |
| 1. Educational goal

The aim of the course is that students learn how to in conditions of Serbia can achieve higher and stable yields of good quality with satisfactory profitability and conservation of agro ecosystems. |
| 1. Educational outcomes

After completion of lectures and exercises student will be qualified and informed with the basic elements of growing technology of field and vegetable crops. After passing the exam, the candidate will be qualified to lead the production of cultivated plants and to be successful in this production; and will be trained to combine the knowledge, ability and skills with the given environmental and edaphic conditions. |
| 1. Course content

***Theoretical teaching***: In the part of field crops will be studied the next plant species: wheat, barley, corn, beans, soybeans, peas, sunflower, canola, hemp, sugar beets, potatoes, tobacco and alfalfa. From vegetable crops will be studied: carrots, parsley, celery, parsnip, beetroot, radish, onion, garlic, leek, shallot, welsh onion, cabbage, kale, cauliflower, broccoli, brussels sprouts, collards, cabbage, Chinese and Peking cabbage, lettuce, spinach, endive, tomatoes, peppers, eggplant, cucumber, melon, watermelon, pumpkin, green peas, green beans, asparagus, artichokes, rhubarb, horseradish. At each crop will be studied the following: 1. General characteristics: economic importance, area and yields in the world and in our country, geographic distribution and origin of the species. 2. Biological characteristics and requirements for growing conditions in the vegetation period and phonological stages. 3. Production Technology: crop rotation, selection of preceding crops and suitability of each crops for the next crop, tillage and seedbed preparation; fertilization (manner, time, relation of N:P:K, quantity of this nutrients and some specificity of crops); sowing (varieties and hybrids, seed quality and seed preparation, sowing time and method of planting, ie, sowing rate and density of crops with emphasis on varietal specificity) and depth of sowing; crop care (fight against weeds, pests and diseases, fertilization with nitrogen – topdressing and specific measures of care); harvest (physiological and technological maturity, moment and way of harvesting, machines for harvest and storage). Through teaching of the production technology will be constantly emphasizes the role and importance of timely and quality of performance of all agro-technical measures and the possibility of rationalization of production processes by using the latest achievements of science and practice.***Practical exercises***: Introduce students to the botanical division, morphological characteristics and developmental stages of the plants specified, using slides, and fresh and dry material from the laboratory. |
| 1. Teaching methods

Lectures, Practice/ Practical classes, Consultations |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Activity during lectures | Yes | 6 (field crops) + 4 (vegetable crops) | *Oral part of the exam* | Yes | 42 (field crops) + 28 (vegetable crops) |
| Colloquium | Yes | 12 (field crops) + 8 (vegetable crops) |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Bharat P. Singh | Industrial Crops and Uses | Fort Valley State University, Fort Valley, Georgia, USA, CAB International  | 2010 |
|  | John H. Martin, Richard P. Waldren, David L. Stamp | Principles of Field Crop Production | Pearson Education Inc., Upper Saddle River, New Jersey, Columbus, Ohio, USA | 2006 |
|  | Robert G. Hoeft, Emerson D. Nafziger, Richard R. Johnson and Samuel R. Aldrich | Modern corn and soybean production | MCSP Publications; 1st edition | 2000 |