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| Course: | *Growing of small grains and pulses* |
| Course id: 3ORT7O25 |
| Number of ECTS: 6 |
| Teacher: | Ph.D. Branko Marinković; contributors: Ph.D. Dragana Latković, Ph.D. Goran Jaćimović |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 4 | Practical classes: 3 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | Agrochemistry, Fundamentals of plant production, Diseases and pests of field plants, Agricultural machinery, Irrigation of agricultural crops |
| 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. Next crops will be studied: wheat, barley, oats, corn, beans, soybeans, peas. |
| 1. Educational outcomes

After completion of lectures and exercises student will be qualified and informed with the basic elements of growing technology of field 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***: For each plant species will be studied following chapters: 1) General characteristics: economic importance, area and yields in the world and in our country, geographic distribution, origin and history of plant species. 2) Biological characteristics and requirements for growing conditions. 3) Production technology: crop rotation (rotation and convenience in the crop rotation), tillage; seedbed preparation; fertilization (manner, time and amount of nutrients), sowing (choice of varieties and / or hybrids, seed quality, seed preparation for sowing, time and method of sowing, sowing rate or crop density which need to be achieved with emphasis on varietal specificity); crop care (fight against weeds, pests and diseases, eventually application of nitrogen, inter-row cultivation and specific measures of care); harvest (physiological and technological maturity, time and method of harvesting, processing and storage of finished products). In the context of growing technology, special attention will be paid to the quality of the applied measures and cost-effectiveness.***Practical exercises***: On the exercises, students will be conversant with the morphology of the above species, with the stages of growth and development (phenological phases and stages of organogenesis). Within exercises will be presented fresh and dry plant material and photos (slides) of plants. The growth stages and looks of plants, students will be able to see in the botanical garden and within field exercises which will be performed 2-3 times per semester in production conditions. |
| 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 | 5 | *Oral part of the exam* | Yes | 70 |
| Colloquium | Yes | 25 |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | 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 |
|  | Samuel Davies and George Evans | Soybean and Wheat Crops: Growth, Fertilization, and Yield | Nova Science Publishers, Inc., New York, USA | 2009 |
|  | Robert G. Hoeft, Emerson D. Nafziger, Richard R. Johnson and Samuel R. Aldrich | Modern corn and soybean production | MCSP Publications; 1st edition | 2000 |
|  | Internet sources; Thematic domestic and international journals |
|  | Lecture notes of professors and assistants |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationUNDERGRADUATE ACADEMIC STUDIES CROP SCIENCE |
| Table 5.2 Course specification |