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| Course: | Plant Breeding |
| Course id: |
| Number of ECTS: 6 |
| Teacher: | Jan J. Boćanski, Velimir N. Mladenov |
| Course status | Mandatory |
| Number of active teaching classes (weekly) |
| Lectures: 60 | Practical classes: 30 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | None/navesti ako ima |
| 1. Educational goal

To familiarize students with the theoretical and practical knowledge in the field of biotechnology science that can be used when creating new varieties. |
| 1. Educational outcomes

After graduation, the student should acquire knowledge that will enable them to the proper selection of varieties and zoning affects the higher productivity of their farms. |
| 1. Course content

**Theory lessons**Plant Breeding as a scientific discipline: Significance and tasks. The origin of the genetic variability of plants: centers of origin of plants, introduction of plants, preservation of biodiversity. Reproduction systems for agricultural plants. The genetic bases of plant breeding. Methods of plant breeding. Molecular biology: Applications in plant breeding. Plant breeding for resistance to parasites. Methods of selection in self-pollinated plant species. Methods of selection in pollinated plant species. The genetic composition, adaptability and zoning varieties.**Practical teaching: Exercise, Other modes of teaching, Study research work**The technique of experimenting. Heritabinost and genetic gain from selection. Testing of combining ability. Methods of assessment of the properties of field and vegetable crops. Adaptability varieties. Recognition of the newly varieties. The technique of hybridization and the creation of inbred lines. Field exercises: introduction and practical work in the greenhouse and in the field. |
| 1. Teaching methods

Lectures, Practice/Practical classes |
| Knowledge evaluation (maximum 100 points) |
| Pre-examination obligations | Mandatory | Points | Final exam | Mandatory | Points |
| Lecture attendance | Yes | 10 | *Theoretical part of the exam/Oral part of the exam/Written part of the exam-tasks and theory* | Yes | 25 |
| Test | Yes | 30 |  |
| Exercise attendance | Yes | 35 |
|  | No |  |
| Literature  |
| Ord. | Author | Title | Publisher | Year |
|  | Poehlman, J. M. and D. A. Sleper | Breeding Field Crops. 4th edition. | Iowa State University Press | 1994 |
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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Programme AccreditationBachelor study-Field and Vegetable Crops |
| Table 5.2 Course specification |