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| Course: | Special Plant Breeding |
| Course id: |
| Number of ECTS: 6 |
| Teacher: | Jan J. Boćanski, Velimir N. Mladenov |
| Course status | Elective |
| Number of active teaching classes (weekly) |
| Lectures: 30 | Practical classes: 30 | Other teaching types: | Study research work: | Other classes: |
| Precondition courses | Theory of Plant Breeding |
| 1. Educational goal

To familiarize students with the latest developments in the field of biotechnology and new methods that can be used in seed production. The case is based on theoretical assumptions. |
| 1. Educational outcomes

It allows the student to understand the current trends in field crops and point out that the scientific discipline should focus its future work. |
| 1. Course content

**Theory lessons**Wheat breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Maize breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Sugar beet breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Sunflower breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Soybean breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Alfalfa breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties. Vegetable breeding: importance, origin, botanical background and pollination system; starting material for processing and its use; breeding methods; methods of selection and pre-selection testing materials; refinement of individual properties.**Practical teaching: Exercise, Other modes of teaching, Study research work**The exercises will follow the teaching unit, students will prepare essays from certain areas, which will present during the exercise. For the preparation of seminar papers using the latest sources of literature from international journals. |
| 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 |
|  | Hallauer, A. R. (Ed.) | Specialty corn. | CRC Press, New York. | 2001 |

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| Znak univerziteta | UNIVERSITY OF NOVI SADFACULTY OF AGRICULTURE 21000 NOVI SAD, TRG DOSITEJA OBRADOVIĆA 8 | Znak fakulteta2 |
| Study Program AccreditationMASTER STUDY-Genetics, Plant Breeding and Seed Production |
| Table 5.2 Course specification |