

Study programme: General Agronomy			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
Course title: Agrochemistry			
Lecturer: Assoc. Prof. Ljiljana Bošković Rakočević, PhD			
Language of instruction: English			
ECTS credits: 5			
Prerequisite:			
Semester: <i>summer</i>			
Course objective			
To enable the student to acquire basic knowledge of soil fertility and use of fertilisers as important factors in maintaining soil fertility and satisfying crop nutrient requirements.			
Learning outcomes			
The application of the acquired knowledge of soil fertility and fertiliser use in a farming environment for soil conservation and safe food production purposes.			
Course contents			
<i>Theoretical instruction</i>			
Soil adsorption capacity. Macronutrients in soil (nitrogen, phosphorus, potassium, calcium, magnesium, sulphur). Micronutrients in soil (iron, manganese, zinc, boron, molybdenum, copper, cobalt). Heavy metals in soil. Organic fertilisers. Mineral fertilisers.			
<i>Practical instruction</i>			
Soil sampling. Soil reaction (pH). Humus content of soil. Total nitrogen in soil. Readily available phosphorus and potassium in soil. Micronutrients in soil. Nitrogen fertilisers. Phosphorus fertilisers. Mixed fertilisers. Determination of fertiliser rates. Field trials.			
Recommended reading			
Marschner, H. (1986): Mineral Nutrition of Higher Plants. Academic Press Inc., London, pp. 1-672. Kabata-Pendias, A., Pendias, H. (2001). Trace elements in soils and plants. 3 rd edition, Florida: CRC Press, Boca Ration.			
Hours of active teaching			Other classes
Lectures:	Practicals: 2x15=30	Other forms of teaching Tutorials 3x15=45	
Teaching methods			
Lectures, practicals, interactive teaching, tests, term paper assignments			
Assessment (maximum points 100)			
Examination requirements	Points	Final examination	Points
Class participation	10	oral examination	
Practical sessions/tests	20	written examination	50
Term paper assignments/homework	20	
Project			
Other			
Grading system			
Grade	ECTS	Description	
10	91-100	Excellent	
9	81-90	Exceptionally good	
8	71-80	Very good	
7	61-70	Good	
6	51-60	Passing	
5	≤50	Failing	