

Study programme: General Agronomy			
Type and level of study: Bachelor's degree (240 ECTS) – First cycle			
<b>Course title: Agrochemistry</b>			
<b>Lecturer:</b> Prof. Ljiljana Bošković Rakočević, PhD			
<b>Language of instruction:</b> English			
ECTS credits: 5			
Prerequisite:			
Semester: <i>summer</i>			
<b>Course objective</b>			
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.			
<b>Learning outcomes</b>			
The application of the acquired knowledge of soil fertility and fertiliser use in a farming environment for soil conservation and safe food production purposes.			
<b>Course contents</b>			
<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.			
<b>Recommended reading</b>			
Marschner, H. (1986): Mineral Nutrition of Higher Plants. Academic Press Inc., London, pp. 1-672. Kabata-Pendias, A., Pendias, H. (2011). Trace elements in soils and plants. 4 <sup>th</sup> edition, Florida: CRC Press, Boca Ration, pp. 1-505.			
<b>Hours of active teaching</b>			<b>Other classes</b>
Lectures:	Practicals: 2x15=30	Other forms of teaching Tutorials 3x15=45	
<b>Teaching methods</b>			
Lectures, practicals, interactive teaching, tests, term paper assignments			
<b>Assessment (maximum points 100)</b>			
<b>Examination requirements</b>	<b>Points</b>	<b>Final examination</b>	<b>Points</b>
Class participation	<b>10</b>	oral examination	
Practical sessions/tests	<b>20</b>	written examination	<b>50</b>
Term paper assignments/homework	<b>20</b>	.....	
Project			
Other			
<b>Grading system</b>			
<b>Grade</b>	<b>ECTS</b>	<b>Description</b>	
<b>10</b>	<b>91-100</b>	Excellent	
<b>9</b>	<b>81-90</b>	Exceptionally good	
<b>8</b>	<b>71-80</b>	Very good	
<b>7</b>	<b>61-70</b>	Good	
<b>6</b>	<b>51-60</b>	Passing	
<b>5</b>	<b>≤50</b>	Failing	