

<b>Study program:</b> Agricultural Sciences			
<b>Type and level of study:</b> Doctoral academic studies			
<b>Course Title:</b> Scientific research methodology			
<b>Teacher(s)</b> Professor Sonja Veljovic-Jovanovic, PhD, Research Fellow			
<b>Status:</b> Obligatory, I semester			
<b>ECTS:</b> 12			
<b>Prerequisite:</b> None			
<b>The goal of the course:</b> Introduction to different approaches and methods used in scientific research, implementation of acquired knowledge for designing and conducting doctoral dissertation.			
<b>The outcome of the subject:</b> Developing skills for designing, organizing and conducting research independently in specific scientific area. Writing academic papers.			
<b>Syllabus:</b> <i>Theoretical study</i> - Introduction to scientific research. Formulation and coordination of research with current trends and reference centers. Techniques and methods used in laboratory research. Methods for designing experiments and collecting sampling material, experimental protocols. Methods for interpretation of data and presentation of results. Using search engines for scientific articles and using literature data. Writing scientific articles. Analysis and reviewing of scientific articles. Presentation techniques. <i>Practical classes</i> - The aim of the practical classes is to gain detailed knowledge about methods used in research in laboratory and field conditions. Demonstration of physiological and biochemical techniques for sampling, measurement and sample analysis. Students will learn about practical aspects of laboratory work, most common pitfalls and means to overcome them.			
<b>Literature:</b> 1. <a href="https://study.com/academy/lesson/research-methodology-approaches-techniques-quiz.html">https://study.com/academy/lesson/research-methodology-approaches-techniques-quiz.html</a> 2. <a href="https://www.khanacademy.org/science/high-school-biology/hs-biology-foundations/hs-biology-and-the-scientific-method/a/the-science-of-biology">https://www.khanacademy.org/science/high-school-biology/hs-biology-foundations/hs-biology-and-the-scientific-method/a/the-science-of-biology</a> 3. Scientific articles, reviews, related book chapters			
<b>Number of lectures:</b>			Other Classes
Lectures: 10	Practices: 4	Other forms of teaching:	Student research work: 6
<b>Teaching methods:</b> Interactive lectures, writing literature reviews, exam preparations. Individual tutorials regarding theoretical/practical classes.			
Score for grading (maximal 100 points)			
<b>Pre-commitments</b>	<b>Points</b>	<b>The final exam</b>	<b>Points</b>
Activity during lectures	max 15	Written exam	max 15
Practical classes	max 25	Oral examination	max 20
Colloquia	max 10	Tests	max 15
Seminars			
<i>Total</i>			