

<b>Study Programme:</b> Master academic studies of Forensics			
<b>Course Unit Title:</b> Forensic palynology			
<b>Course Unit Code:</b> FB-12			
<b>Name of Lecturer(s):</b> Bojan Konstantinović			
<b>Type and Level of Studies:</b> Master academic studies, second level			
<b>Course Status (compulsory/elective):</b> Elective			
<b>Number of ECTS Allocated:</b> 6			
<b>Prerequisites:</b> None			
<b>Course Aims:</b> Acquiring knowledge about basic concepts and methods that relate to the field of forensic palynology: pollen structure, pollen identification, pollen spreading paths, plant pollination methods, time and methods of collecting and preserving pollen as forensic evidence.			
<b>Learning Outcomes:</b> By completing this course the student will be able to: <ol style="list-style-type: none"> <li>To solve problems from the area of forensic palynology, independently or in a team;</li> <li>Implement concepts and ideas of forensic palynology in solving criminal activities and main disputes;</li> <li>Achieves conclusion and give an expert opinion on the principles of forensic science, to satisfy the needs of procedure organs and other subjects, that have ordered the expertise.</li> </ol>			
<b>Syllabus:</b> <i>Theory</i> Introduction in forensic palynology. Definition of pollen and spores. History of forensic palynology. Biological and physical pollen traits. Chemical and physical pollen resistance. Pollen spreading by wind. Distribution of pollen by insects and birds. Pollen distribution by water. Pollen application in forensics. Time and methods of collecting pollen as a forensic evidence. Preservation of pollen samples. Pollen identification. The future of forensic palynology. <i>Practice</i> Pollen structure-size, shape. Plant polination methods, pollen spreading ways. Identification and analysis of pollen. Pollen preparation for analysis. Pollen sampling from soil, textile, clothes, water, mud. Examples of pollen application as forensical evidences in cases of murder and genocide.			
<b>Required Reading:</b> <ol style="list-style-type: none"> <li>Konstantinović B. (2011) Osnovi herbologije i herbicidi, Univerzitet u Novom Sadu Poljoprivredni fakultet, Novi Sad.</li> <li>Konstantinović B., Konstantinović B., (2014) Osnovi herbologije i korovi urbanih sredina, Univerzitet u Novom Sadu Poljoprivredni fakultet, Novi Sad.</li> <li>Brown, A. (2006) The use of forensic botany and geology in war crimes investigations in NE Bosnia.</li> <li>Forensic Science International, 163, 204–210.</li> <li>Bull, P., Morgan, R., Sagovsky, A., Hughes, G. (2006) The transfer and persistence of trace particulates: experimental studies using clothing fabrics. Science &amp; Justice, 46, 185–195.</li> <li>Miller Coyle H. (2005) Forensic Botany – Principles and Application to Criminal Casework.</li> <li>Mildenhall D. (2006) Hypericum pollen determines the presence of burglars at the scene of a crime: an example of forensic palynology. Forensic Science International, 163, 231–235.</li> <li>Mildenhall D. (2009) Forensic palynology: an increasingly used tool in forensic science. European. Journal of Aerobiology and Environmental Medicine, 2, 7–11.</li> <li>Olivera, M., Duivenvoorden, J., Hooghiemstra, H. (2009) Pollen rain and pollen representation across a forest-parano ecotone on nothern Ecuador. Review of Palaeobotany and Palynology, 157, 285–300.</li> <li>Phumphumirat, W., Mildenhall, D., Purintavaragul, C. (2009) Pollen deterioration in a tropical surface soil and its impact on forensic palynology. The Open Journal of Forensic Science, 2, 34–40.</li> <li>Hall D.W., Byrd J.H. (2012): Forensic Botany A practical Guide. Wiley-blackwell.</li> </ol>			
<b>Number of active lessons:</b> 5 (75)	<b>Lectures:</b> 3 (45)	<b>Practical work:</b> 2 (30)	
<b>Teaching Methods:</b> Theoretical lectures-verbal-textual and demonstrative illustrative methods. Practical work: managing autonomous work of students and demonstrative illustrative methods.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Activity during class	10	oral exam	50
Seminar	10		
Practical work	10		
Preliminary exam(colloquium)	20		