

**Biotechnical Faculty / PLANT PROTECTION / NEMATOTOLOGY**

<b>Course:</b>	NEMATOTOLOGY			
<b>Course ID</b>	<b>Course status</b>	<b>Semester</b>	<b>ECTS credits</b>	<b>Lessons</b> (Lessons+Exercises+Laboratory)
13376	Mandatory	3	5	2+0+2
<b>Programs</b>	PLANT PROTECTION			
<b>Prerequisites</b>	There is NOT conditionality with other subjects.			
<b>Aims</b>	The aim of the lesson is to familiarize students with morphology, anatomy, ecology, relations with vectors and systematics of nematodes; master the skills of recognizing phytoparasitic nematodes and the symptoms of damage they cause, in order to be able to make a decision on the method and time of suppression.			
<b>Learning outcomes</b>	After passing this exam, the student will be able to (1) Understand the morphological and anatomical structure of nematodes; (2) Explain the relationship between nematodes and other living things, especially vectors; (3) Determines the most important phytophagous nematodes; (4) Uses knowledge for the purpose of preventive and curative protection of plants from nematodes; (5) Uses chemical measures when controlling nematodes, "One health" concept.			
<b>Lecturer / Teaching assistant</b>	assist. prof. Igor Pajović, PhD			
<b>Methodology</b>	Lectures, exercises, seminar work, independent student work, consultations, colloquiums and final exam.			
<b>Plan and program of work</b>				
Preparing week	Preparation and registration of the semester			
I week lectures	Introduction to nematology, classification and systematization of nematodes.			
I week exercises	Nematology laboratory and use of dichotomous keys for determination of nematodes.			
II week lectures	Morphology and anatomy of nematodes.			
II week exercises	Microscopy in nematology.			
III week lectures	The relationship between nematodes and other living creatures (parasitism, phytoparasitic, antagonists, hematophagies, predators, virus vectors...); Relationship with vectors; Ecology of nematodes.			
III week exercises	Recognizing the symptoms of nematode attacks on other living beings.			
IV week lectures	Characteristics of the most important groups, orders, families and genera of phytoparasitic nematodes.			
IV week exercises	Differentiation of the most important groups of phytoparasitic nematodes.			
V week lectures	Techniques of working with nematodes in the field, sampling techniques.			
V week exercises	Working with nematodes in the field.			
VI week lectures	Techniques of working with nematodes in the laboratory.			
VI week exercises	Colloquium I			
VII week lectures	Nematodes in fruit growing and viticulture.			
VII week exercises	Remedial colloquium I			
VIII week lectures	Nematodes in crop production.			
VIII week exercises	Sample processing, extraction and elutriation of nematodes.			
IX week lectures	Potato cysts nematodes.			
IX week exercises	Basic differences between nematodes that can be a problem in fruit growing and vineyards.			
X week lectures	Nematodes in vegetable production.			
X week exercises	Basic differences between nematodes that can be a problem in potato production, in agriculture, on forage plants and lawns.			
XI week lectures	Nematodes in objects of protected area I.			
XI week exercises	Basic differences between nematodes that can be a problem in vegetable growing and in protected area facilities.			

XII week lectures	Nematodes in objects of protected area II.					
XII week exercises	Colloquium II					
XIII week lectures	Nematodes of tobacco, ornamental and forest plants.					
XIII week exercises	Remedial colloquium II					
XIV week lectures	Possibilities of controlling phytoparasitic nematodes, non-chemical measures and IMP.					
XIV week exercises	Basic differences between nematodes that can be a problem on tobacco, ornamental and forest plants; Methods of controlling phytoparasitic nematodes.					
XV week lectures	Possibilities of controlling phytoparasitic nematodes, use of nematocides.					
XV week exercises	Defense of the seminar paper.					
<b>Student workload</b>						
<b>Per week</b>	<b>Per semester</b>					
<b>5 credits x 40/30=6 hours and 40 minuts</b> 2 sat(a) theoretical classes 2 sat(a) practical classes 0 excercises <b>2 hour(s) i 40 minuts</b> of independent work, including consultations	Classes and final exam: <b>6 hour(s) i 40 minuts x 16 =106 hour(s) i 40 minuts</b> Necessary preparation before the beginning of the semester (administration, registration, certification): <b>6 hour(s) i 40 minuts x 2 =13 hour(s) i 20 minuts</b> Total workload for the subject: <b>5 x 30=150 hour(s)</b> Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) <b>30 hour(s) i 0 minuts</b> Workload structure: <b>106 hour(s) i 40 minuts (cources), 13 hour(s) i 20 minuts (preparation), 30 hour(s) i 0 minuts (additional work)</b>					
<b>Student obligations</b>	Students are required to attend lectures and exercises, do a seminar, do both colloquiums and the final exam. If necessary, consultation one school hour during the week.					
<b>Consultations</b>	Consultation 45 minutes during the week.					
<b>Literature</b>	1. Milan Radivojević (2019). Phytonematology. University of Belgrade, Faculty of Agriculture. 2. Krnjajić Đ. and Krnjajić S. (1987). Phytonematology. 3. Jama N. (1983). Nematofauna of some vegetable crops grown in a protected area. Additional literature: 4. Barker K.B., C.C. Carter and Sasser, J.N. (1985). An Advanced Treatise on Meloidogyne: Volumes I and II. 5. sjacob J.J. and Bezooijen J.V., (1977). A manual for practical work in nematology.					
<b>Examination methods</b>	Seminar paper 10 points; 2 colloquiums of 20 points each (40 points in total); final exam maximum 50 points. If cabinet classes are held, colloquiums are worth 25 points each. Grades and points: A (≥ 90 to 100 points); B (≥ 80 to < 90); C (≥ 70 to < 80); D (≥ 60 to < 70); E (≥ 50 to < 60) F < of 50. A passing grade is obtained if at least 50 points are accumulated cumulatively.					
<b>Special remarks</b>						
<b>Comment</b>						
<b>Grade:</b>	F	E	D	C	B	A
<b>Number of points</b>	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points