

Discipline	<i>PLANT PROTECTION, PART 2 (PHYTOPATHOLOGY)</i> code: 22 summer semester		
Specialty	AGRONOMY		
ECTS credits: 6	Form of assessment: Exam		
Lecturer	Prof. Ivan Kiryakov, PhD Room: NUK 317a Phone: +359 52 385 725 E-mail: idkiyakov@abv.bg		
Department	PLANT PRODUCTION		
Faculty	<i>FACULTY OF MECHANICAL ENGINEERING AND TECHNOLOGIES</i>		
Annotation:			
The course "Phytopatology" acquaints students with basic issues related to the development of phytopathology, the host-pathogenic relationships, the morphological features of the main groups of phytopathogenic microorganisms and high parasites and the general symptomatology of the diseases caused by them, methods for determining the losses from diseases, and methods of struggle. Special phytopathology introduces the students to the crop diseases that are of major importance for Bulgaria, the morphological, etiological and epidemiological characteristics of their causative agents and the main measures and practices for combating them.			
CONTENTS:			
Training Area		Hours lectures	Hours seminar exercises

Phytopathology as a science of plant diseases.	1	
The external environment as an element of the pathological process. Non-communicable diseases.	1	
Parasitism, specialization and variability of phytopathogens.	2	
Pathogenesis - essence and main phases.	2	
Epiphytobia.	1	
Strategy, approaches and methods for combating diseases.	2	
Viruses as agents of plant diseases.	1	
Phytoplasmas as causative agents of plant diseases.	1	
Bacteria as causative agents of plant diseases.	1	
Fungi as agents of plant diseases. Sexual and asexual reproduction in fungi.	2	
General characteristics of the division Plasmodiophoromycota, class Plasmodiophoromycetes.	1	
General characteristic of the division Oomycota, class Oomycetes.	1	
General characteristics of the division Ascomycota, classes Taphrinomycetes, Leotiomycetes, Pyrenomycetes, Dothideomycetes and division Deuteromycota.	2	
General characteristic of division Basidiomycota, class Ustilaginomycetes, Exsobasidiomycetes and Pucciniomycetes.	2	
Типове признаци на болестите по растенията и определяне на икономическите загуби.	1	
Key Cereal Diseases.	2	
Key diseases of leguminous crops.	1	
Key diseases of sunflower and canola.	1	
Key diseases of potato and tobacco.	1	
Key diseases of vegetable crops.	1	
Key diseases of seed and shell fruit species.	1	
Key diseases of stone fruit species.	1	
Key vine diseases.	1	
Organization and equipment of phytopathological laboratories.		1
<u>Хранителни среди и разтвори. Съхраняване на растителните проби и патогенни изолати.</u>		2

Viruses as agents of plant diseases.		2
Bacteria as causative agents of plant diseases.		2
Fungi as agents of plant diseases.		2
General characteristics of fungi from the divisions Plasmodiophoromycota, Oomycota, Chytridiomycota and Zygomycota.		2
General characteristic of the division Oomycota.		2
General characteristic of the division Basidiomycota.		2
General characteristic of the class Deuteromycota.		2
Diagnosis of key cereal diseases.		2
Diagnosis of key legume diseases.		2
Diagnosis of key diseases of sunflower, canola, tobacco and potatoes.		2
Diagnosis of key diseases of vegetable crops.		2
Diagnosis of key diseases in stone, seed and shell species.		2
Diagnosis of key diseases of berry species and vine.		2
Determining losses from plant diseases.		1
<b>TOTAL:60 h</b>	<b>30</b>	<b>30</b>