

**DETERMINATION OF CREDITS COURSES
NEMATOLOGY**

Course	CLO	CLO 1.1	Learning Methods	Study Materials	Study Hours		Sks/Credits
					T	P	
Plant Nematology	Master the substantive theory of agricultural nematology regarding the definition of nematodes and the environment that influences nematode metabolism, reproduction and growth	Definition of nematodes and their role in agroecosystems	Face to Face, Structure Assignment, Independent Study	1. Definition of nematodes 2. The role and importance of nematode management in agroecosystems	7	0	0,15
	Be able to categorize and compare the morphological and physiological characteristics of nematodes	Morphological structure, and classification of nematodes	Face to Face, Structure Assignment, Independent Study	1. Nematode morphology 2. Life cycle of nematodes 3. Classification of nematodes	14	0	0,31
		Organs and organ systems of nematodes	Face to Face, Structure Assignment, Independent Study	1. Nematode digestive system 2. Nematode respiratory system 3. Nematode nervous system 4. Biosynthesis in nematode metabolism 5. Nematode survival strategies	14	0	0,31
		Nematodes as plant pathogens and control of plant pathogenic nematodes	Face to Face, Structure Assignment, Independent Study, Practicum	1. Typical characteristics of phytopathogenic nematodes 2. Symptoms and signs of phytopathogenic nematode attacks 3. Types of strategies for controlling phytopathogenic nematodes	14	0	0,31
		The influence of biotic and abiotic factors on the reproductive system, growth & development of nematodes	Face to Face, Structure Assignment, Independent Study, Practicum	1. Phases of reproduction, growth and development of nematodes 2. The influence of biotic and abiotic factors on reproduction, growth and development of nematodes	14	0	0,31
	Able to apply basic techniques for analyzing and calculating nematode populations	Plant pathogenic nematode isolation laboratory techniques	Face to Face, Structure Assignment, Independent Study, Practicum	1. Nematode exploration techniques 2. Nematode sampling technique 3. Extraction tray method 4. Root maceration method 5. Sieving method 6. Incubation method 7. Nematode staining technique 8. Nematode identification techniques 9. Nematode counting techniques	7	14	0,65

		Entomopathogenic nematode propagation techniques	Face to Face, Structure Assignment, Independent Study, Practicum	1. Typical characteristics of biocontrol agent nematodes 2. Types of strategies for using nematodes as biocontrol agents	7	0	0,15
	Implementing agricultural nematology science to solve problems in the fields of agriculture, biotechnology, food and the environment	Diagnostic technique of plant pathogenic nematode	Face to Face, Structure Assignment, Independent Study, Practicum	Techniques for analyzing nematode damage to plants	7	7	0,40
		Nematodes as biocontrol agents and their use in agroecosystems	Face to Face, Structure Assignment, Independent Study, Practicum	Entomopathogenic nematode propagation techniques	7	7	0,40
				Total Hours	91	28	3,00
	sks/credit Theory		(Total Hours for Theory × 1 sks)/(2.83 × 16)	SKS Theory			2,01
	sks/credit Practicum/field work		(Total Hours for Practicum × 1 sks)/(2.83 × 10)	SKS Practicum			0,99

Notes: T = Theory P = Practicum/Field Work

1 SKS/Credit = 170 minutes = 2,83 hours

1 Semester = 16 Face Times

The study time required for students to achieve CLO at each learning stage is determined by the lecturer/lecturer team based on their experience in teaching the course.

Total Course SKS/Credits = Theory + Practicum/field work