Course Unit Descriptor

Study Programme: AGRONOMY

Course Unit Title: SPECIAL PARASITOLOGY

Course Unit Code: 19.AGR038

Name of Lecturer(s): prof. Aleksandar Jurišić, PhD, prof. Aleksandra Petrović, PhD

Type and Level of Studies: Doctoral academic studies

Course Status (compulsory/elective): elective

Semester (winter/summer): winter

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 7

Prerequisites: None

Course Aims:

Mastering the knowledge and skills from the content of the subject, which provides a basis for recognizing and determining parasitic species, diagnosis of diseases that occur in humans and animals, symptoms of plant damages and possibilities of pests' practical control.

Learning Outcomes:

A PhD student is qualified for independent practical and scientific research by applying the acquired knowledge in the field of special parasitology.

Syllabus:

Theory

Introduction to parasitology (zooparasitology and phytoparasitology). Systematics of parasites important for agriculture, veterinary and medicine. Protozoa as endoparasites of humans and animals: Rhizopoda - amoebas, Ciliata - flagellates, Zoomastigophora - flagellates, Apicomplexa - Sprozoa, unclassified protozoa and Microspora - microsporidia. Helminthology: Trematodes, Cestodes, Nematoda. Phytonematology (ecto- and endoparasites of plants). Arthropoda: Myriapoda, Acarina (human and animal parasites, phytophagous and storage mites). The most common parasitic zoonoses caused by protozoa, trematodes, cestodes and arthropods. Host-parasite relationships and vector potential of the species. Possibilities of diagnosis, prevention and control of various ecto- and endoparasites.

Practice

Microscopy techniques and determination of taxonomically significant characteristics of Rhizopoda, Ciliata, Zoomastigophora, Apicomplexa - Sprozoa, unclassified protozoa, Microspora, Trematodes, Cestodes, Nematoda, Arthropoda, Myriapoda, Acarina. Identification and use of identification keys. Monitoring and sampling methods for certain parasitic animal species. Implementation of control methods and potential parasitic species suppression in agriculture, medicine and veterinary.

Required Reading:

Goddard J. (2007): Physician's Guide to Arthropods of Medical Importance. CRC Press Taylor & Francis Group, USA.
Bowman D.D. (1999): Georgis Parasitology for Veterinarians. 7th edition. W.B. Saunders Company.
Bowman A.S., Nuttall P. (Eds) (2008): Ticks: Biology, Disease and Control. Cambridge University Press, UK.
Chen, Z. X., Chen, S.Y., Dickson, D.W. (eds) (2003): Nematology - Advances and Perspectives. Volume II: Nematodec Management and Utilization. Tsinghua University Press China & CABI Publishing UK/USA.
Goddard J. (2008): Infectious Diseases and Arthropods. Humana Press, USA.

Weekly Contact Hours:	**Lectures: 60**	**Practical work: 60**

Teaching Methods:

Oral presentation and consultations. Presentation, demonstration, and illustration methods for practical field and laboratory work, using specific sampling equipment for specific animal species, microscopy. Practical laboratory and experimental methods.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation		written exam	30
Practical work	20	oral exam	50
Preliminary exam(s)		…….	
Seminar(s)			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			