

SYLABUS

Nazwa przedmiotu/modułu (zgodna z zatwierdzonym programem studiów na kierunku)			Liczba punktów ECTS 2
Clinical Parasitology			
Nazwa przedmiotu/modułu w j. angielskim			
Clinical Parasitology			
Jednostka(i) realizująca(e) przedmiot/moduł (instytut/katedra)			
Katedra Nauk Przedklinicznych i Chorób Zakaźnych			
Kierownik przedmiotu/modułu			
dr hab. Mirosław Różycki			
Kierunek studiów	Poziom	Profil	Semestr
weterynaria	Jednolite studia magisterskie	praktyczny	VII
W zakresie	Specjalizacja magisterska		
RODZAJE ZAJĘĆ I ICH WYMIAR GODZINOWY			
(zajęcia zorganizowane i praca własna studenta)			
Forma studiów: stacjonarne		Forma studiów: niestacjonarne	
- wykłady	15	- wykłady	
- ćwiczenia	15	- ćwiczenia	
- praca własna studenta	20	- praca własna studenta	
Łączna liczba godzin: 50		Łączna liczba godzin:	
CEL PRZEDMIOTU/MODUŁU			
The main goal of „Clinical Parasitology” is to provide veterinary students with knowledge and skills necessary to diagnose, treat and prevent parasitic infections in animals. This includes the understanding of the biology, epidemiology, diagnosis, treatment, and control of parasites that affect various animal species. The aim is to ensure the health and welfare of animals, while also protecting public health and reducing the economic impact of parasitic infections on animal production.			
METODY DYDAKTYCZNE			
Lecture, Exercises and tasks (students work on tasks individually or in groups), Discussion, Projects, Problem-based learning, Case-based learning, Combined methods (teacher combines different teaching methods, such as lecture, exercises, discussion, and project, to achieve the best results).			
ZAKŁADANE EFEKTY UCZENIA SIĘ PRZEDMIOTU/MODUŁU			Odniesienie do kierunkowych efektów uczenia się
Wiedza	E1 - The student describes and explains: Basic concepts and terminology in parasitology.		WP_B.W04 WP_B.W05 WP_B.W06
	E2 - The student describes and explains systemic parasitic infections in animals.		
	E3 - The student describes and explains systemic parasitic infections in humans.		
	E4 - The student describes the importance of food and water as vectors for parasitic zoonoses.		
	E5 - The student describes the symptoms and diagnosis of enterobiasis, ascariasis, trichuriasis, and other diseases caused by parasitic zoonoses transmitted through food.		
	E5 - The student describes and explains the risks associated with travel parasitology, including the occurrence, symptoms, and diagnosis of diseases caused by parasites in different regions of the world.		
Umiejętności	E6 - The student describes and explains the role and importance of organizations such as EFSA, ECDC, OIE, WHO in relation to emerging parasitic threats to humans and animals.		WP_B.U02 WP_B.U03 WP_B.U04 WP_B.U13
	E7 - The student is able to define and correctly identify basic parasitic units.		
	E8 - The student is able to perform basic parasitological diagnosis (macroscopic and microscopic methods, serological methods).		
	E9 - The student is able to develop a treatment plan for systemic diseases caused by parasites.		
	E10 - The student is able to develop a diagnostic, monitoring, and treatment plan for a herd.		
Kompetencje społeczne	E11 - The student understands the need for lifelong learning in order to continuously develop their professional skills.		WP_D.S01 WP_D.S06 WP_D.S08
	E12 - Shows responsibility for the decisions made regarding humans and animals.		
	E13 - Has awareness and acts in accordance with the principles of bioethics and professional ethics.		
	E14 - Understands the importance and has a need for continuous education in the field of veterinary parasitology and neurology.		
	E15 - Prioritizes food safety by following the principle of "per bono animali pro publico bono.		

Metody weryfikacji efektów uczenia się Tests and exams - written to evaluate a student's knowledge and understanding of a subject. Homework - tasks given to complete outside of class that allow teacher to evaluate their understanding of the material. Projects and presentations - require students to apply what they have learned in a creative or practical way. Peer review - students evaluate each other's work and provide feedback, which can help reinforce their own understanding of the subject matter. Classroom observation - teachers observe students during class activities and interactions to assess their learning progress. Self-assessment - students evaluate their own learning progress and provide feedback on their strengths and weaknesses.	Symbole efektów przedmiotowych E1-E8
TREŚCI KSZTAŁCENIA Lectures: Subject 1-5: Introduction to Clinical Parasitology. Definitions and classification of parasites. History of clinical parasitology. Basic concepts and terminology in parasitology. Subject 2: Selected systemic parasitic infections (Intestinal Parasites, Blood and Tissue Parasites, Respiratory System Parasites, Urogenital System Parasites). Introduction, occurrence, symptoms, and diagnosis. Treatment and prevention of diseases caused by parasites. 6: Food and waterborne parasitoses. Introduction to food and waterborne parasitoses. Occurrence, symptoms, and diagnosis of the diseases caused by foodborne zoonotic parasites. General concept on treatment and prevention of diseases caused by foodborne parasites. Subject 7: Parasites in Travel. Introduction to parasitology in travel. Occurrence, symptoms, risk and diagnosis of diseases caused by parasites in different regions of the world. Diagnosis, treatment and prevention of diseases caused by parasites during travel with animals. Subject 8: Diagnostic Methods in Clinical Parasitology. Macro and microscopic examination, serological tests, molecular methods, imaging techniques, antigen detection tests. Subject 9: Emerging Parasitic Infections. Introduction to emerging parasitic infections. Occurrence, symptoms, and diagnosis of new and emerging diseases caused by parasites. General information on role WHO, ECDC, EFSA and RAS. Treatment and prevention of new and emerging diseases caused by zoonotic parasites. Subject 10: Immunology of Parasitic Infections. Introduction to immunology of parasitic infections. Immune response to parasitic infections. Immune evasion mechanisms of parasites. Implications for vaccine development and immunotherapy. Outcomes and shortcomings of immunotherapy of parasitic diseases. Subject 11: Epidemiology of Parasitic Infections. Introduction to epidemiology of parasitic infections. Risk factors for parasitic infections. Transmission modes of parasitic infections. Control measures and public health interventions for parasitic infections. Subject 12: One Health Approach to Parasitic Infections. Introduction to the One Health concept. Interactions between humans, animals, and the environment in the transmission of parasitic infections. Implications for surveillance, prevention, and control of parasitic infections. Subject 13: Case Studies in Clinical Parasitology. Case studies of patients with parasitic infections. Diagnosis, treatment, and management of parasitic infections in clinical settings. Ethical considerations and challenges in the diagnosis and management of parasitic infections. Subject 14: Parasitic Infections and Global Health. Introduction to the global burden of parasitic infections. Implications for global health and development. Strategies for addressing the challenges of parasitic infections in low-resource settings. Subject 15: Future Directions in Clinical Parasitology. Emerging trends and technologies in clinical parasitology. Innovations in diagnosis, treatment, and management of parasitic infections. Opportunities and challenges for research and training in clinical parasitology. Trainings: Basic concepts and terminology in parasitology. Treatment and prevention of systemic diseases caused by parasites. Treatment and prevention (inactivation) of diseases caused by foodborne parasites. Prevention of diseases caused by parasites during travel. Control measures and public health interventions for parasitic infections – where are the data's? Surveillance and control of parasitic infections. Ethical considerations and challenges in the diagnosis and management of parasitic infections. Emerging trends and technologies in clinical parasitology.	
Formy i kryteria zaliczenia przedmiotu/modułu Tests: recognition and identification of parasites, diagnostics, risk assessment projects and development of prevention, prophylaxis and control measures. Team projects (various techniques) - interpretation of results and decision-making: presentation in the form of reports. Final evaluation based on a knowledge test (multiple choice test).	Procentowy udział w końcowej ocenie 40% 60%
WYKAZ LITERATURY Veterinary Parasitology: M.A. Taylor BVMS, PhD, MRCVS, DipEVP, Dip ECRSHM, CBiol, MRSB, R.L. Coop BSc, PhD, R.L. Wall BSc, MBA, PhD, FRES, First published: 20 November 2015 Print ISBN: 9780470671627 Online ISBN: 9781119073680 DOI: 10.1002/9781119073680 Diagnostic Parasitology for Veterinary Technicians 6th Edition - July 17, 2022 Charles Hendrix, Ed Robinson, Paperback ISBN: 9780323831031, eBook ISBN: 9780323831048 Literatura uzupełniająca: Medycyna Weterynaryjna, Życie Weterynaryjne, Postępy Mikrobiologii.	