

## Study program: Integrated Academic Studies in Medicine

#### **Course title: Tropical Infectious Diseases**

**Teacher:** Snežana V. Brkić, Vesna S. Turkulov, Sandra I. Stefan Mikić, Siniša Đ. Sević, Dušan M. Lalošević, Zoran N. Golušin, Nadica D. Kovačević, Slavica S. Tomić, Maja S. Ružić, Daniela T. Marić, Dajana F. Lendak

Course status: elective

## ECTS Credits: 3

Condition: Infectious Diseases

## Course aim

The aim of this course is to provide knowledge for recognition, diagnosis and treatment of various tropical diseases. Through theoretical and practical training students will learn to recognize patients with infectious diseases, sample materials for diagnostic purposes and treat tropical diseases from the standpoint of general practitioners.

#### Expected outcome of the course:

Students should acquire basic knowledge of the etiology, epidemiology, pathogenesis, clinical features and treatment of patients with tropical infectious diseases.

Students should, after completing this course, master skills for early detection, diagnosis, differential diagnosis, treatment and prevention of various infectious and tropical diseases using previous knowledge in infectious diseases, microbiology and pharmacology, as well as following the latest scientific achievements in these areas.

## **Course description**

## Theoretical education

1. Introductory lecture - historical overview and importance of tropical diseases, etiologic classification, geographical distribution and mechanisms of transmission, clinical syndromes, diagnostic tests and therapeutic protocols 2. The significance and taxonomy of vectors of infectious tropical disease pathogens 3. Malaria 4. Leishmaniasis 5. Taeniasis and cysticercosis 6. Echinococcosis 7. Nematode infections (ascariasis, enterobiasis, trichuriasis, ancylostomiasis, strongyloidiasis,filariasis) 8. Strongyloidiasis, schistosomiasis 9. Ehrlichiosis, anaplasmosis, Bartonellosis 10. Trypanosomiasis 11. Protozoal gastrointestinal infections 12. HIV infection 13. Traveller's diarrhea and cholera 14. Viral hemorrhagic fever 5. Rickettsioses 16. Sexually transmitted diseases (other than HIV) 17. Fungal infections (hystoplasmosis, blastomycosis, coccidioidomycosis) 18. Zoonosis 19. Rabies 20. Toxocariasis 21. Respiratory tropical diseases 22. Vector borne encephalitis

## Practical education

1. Echinococcosis - clinical review, diagnostic methods (serological, radiological) and therapy 2. Malaria - clinical examination of patients, complications, microscopic blood examination, interpretation of results of other diagnostic methods, treatment 3.Toxoplasmosis - examination , clinical forms, diagnostic tests , interpretation of laboratory and parasitological tests, therapeutic protocols 4. Leishmaniasis - clinical forms, bone marrow puncture, interpretation of results, therapy. 5. Taeniasis and cysticercosis - clinical presentation and complications, diagnostic protocols (X-ray, CT and MR images, lab tests), therapy 6. Trichinosis - diagnostic procedures, interpretation of diagnostic tests and therapy 7. Helminthiasis - diagnostic procedures, interpretation of results and therapeutic protocols 9. Pneumocystis jiroveci infection - a case report, diagnostic, treatment 10. Traveler's diarrhea - diagnosis and therapy 11. Vector encephalitis - diagnosis and therapy 12. Fungal infections - diagnosis and therapy 13. Sexually transmitted diseases - diagnosis and therapy14. Rickettsioses - diagnosis and therapy 15. Systemic bacterial disease - diagnosis and therapy

# Literature

Compulsory

- 1. Guerrant RL, Walker DH, Weller PF. Tropical infectious diseases. Principles, Pathogenes and Practice (Third edition). Churchill Livingstone, Elsevier, Philadelphia, 2011.
- 2. Cook GC, Zumla AL. Mansons Tropical diseases, Saunders, 2003.
- 3. Mandell GL, Douglas GR, Bennett JE. Principles and Practice of Infectious Diseases, seventh edition, Churchill Livingstone, New York, Edinbourgh, London, Melbourne, Tokyo, 2010.

Number of active classesTheoretical classes: 15Practical classes: 30Teaching methodsLectures, practice

Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	30	Written	50
Practices	10	Oral	
Colloquium			
Essay	10		