

26781 - Tropical Parasitic Diseases

Información del Plan Docente

Academic Year	2016/17
Academic center	104 - Facultad de Medicina
Degree	304 - Degree in Medicine
ECTS	4.0
Course	5
Period	First semester
Subject Type	Optional
Module	---

1. Basic info

1.1. Recommendations to take this course

1.2. Activities and key dates for the course

2. Initiation

2.1. Learning outcomes that define the subject

2.2. Introduction

3. Context and competences

3.1. Goals

3.2. Context and meaning of the subject in the degree

3.3. Competences

3.4. Importance of learning outcomes

4. Evaluation

5. Activities and resources

5.1. General methodological presentation

The subject consists of a **theoretical part** , a **practical part** , **tutorials** and **student work** . For each module, we will explain the theoretical concepts and then we will work the contents in the laboratory practices and seminars.

- The **lectures** will be given as participatory master classes.

- Attendance to **practical classes** is compulsory. In each class a video about parasitic tropical diseases will watch and discuss and then laboratory practice will be made.

26781 - Tropical Parasitic Diseases

- In the **seminars** , students will present and discuss clinical cases .

5.2.Learning activities

- **Lectures: Participatory master classes (25 hours of classroom classes)**, in which students will learn the basic concepts that will allow him relate the disease with clinical manifestations and watch real and original images of different parasitic forms and the effects which they produce in the patients.

- **Practical classes (15 hours of classroom classes)**, in which we will watch a film, located in an endemic area for a parasitic disease. In these films patients with typical lesions, appropriate treatments and plans of disease prevention and control are shown. Then a debate on the subject of the film will take place . Laboratory practices will consist in microscopic identification of Microscope Slide Whole Mounts and adults of each type of parasite, as technique "gold standard" to establish the diagnosis and treatment.

All students will be informed about the risks that may have the realization of the practices of this subject, and if dangerous products are handled and what to do in case of accident. All students must sign a commitment to comply with working arrangements and safety to make them. For more information, see the information for students of the Unit Occupational Health and Safety: <http://uprl.unizar.es/estudiantes.html>

- **Seminars (1.5 classroom classes)**: Clinical cases will be resolved by the students individually or in groups. Then each group will expose their cases and they will be discussed, simulating a clinical session.

- **Tutorial activity**: For any queries students can contact teachers by e-mail, on-line (Moodle platform), phone or visiting their office during the teacher's tutorial times published on the students' gateway

- **ADD**: In ADD (Moodle Platform, ADDUnizar), the students have available didactic support materials.

5.3.Program

Theoretical classes : Participatory master classes with the following program:

MODULE 1. Introduction to Clinical Parasitology.

LESSON 1. Associate basic terms of parasitology with their definitions. Host and parasite types. Life cycles. Transmission routes of parasitic diseases. Nomenclature of parasitic diseases.

MODULE 2. Intestinal nematode infections.

LESSON 2. Ascariasis. Trichuriasis. Hookworm disease. Strongyloidiasis. Enterobiasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 3. Blood and tissue nematode infections.

26781 - Tropical Parasitic Diseases

LESSON 3. Trichinellosis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 4. Visceral larva migrans . Cutaneous larva migrans. Anisakiasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 5. Dracunculiasis. Lymphatic Filariasis. Cutaneous Filariasis. Serous cavities Filariasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 6. Abdominal Angyostrongilosis. Eosinophilic Meningitis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 4. Cestode infections.

LESSON 7. Infections caused by adult intestinal tapeworm: Diphyllbothriosis. Diplogonoporiasis. Tapeworm infections cause by Taenia saginata and Taenia solium . Hymenolepiasis. Dipylidiosis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 8. Larval cestode infections : Hydatidosis. Cysticercosis. Cenurosis. Sparganosis. Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 5. Trematoda infections.

LESSON 9. Lung trematodiasis (Paragonimiasis), biliary trematodiasis (Fascioliasis, Chlonorchiasis, Opisthorchiasis, Dicrocoeliasis), intestinal trematodiasis (Fasciolopsiasis, Heterofiasis, Metagonimiasis). Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 10. Intestinal and urogenital Schistosomiasis. Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 6. Intestinal protozoa infections.

LESSON 11. Amebiasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations of intestinal and extraintestinal forms. Complications. Diagnosis. Treatment. Epidemiology, control and prevention. Other intestinal amoebae: differential diagnosis. **Blastocystiasis** .

LESSON 12. Balantidiasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 13. Giardiasis . Dientamoebiasis . Geographical distribution. Etiological agents: morphology and cycle.

26781 - Tropical Parasitic Diseases

Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention. Diagnosis of other intestinal flagellates.

LESSON 14. Cryptosporidiasis . Isosporiasis . Cyclosporiasis . Sarcocystiosis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 7. Urogenital Protozoa Infections.

LESSON 15. Trichomoniasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 8. Blood and tissue protozoa infections.

LESSON 16. Malaria . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Malaria in pregnant women. Malaria in children. Diagnosis. Treatment. Epidemiology, Prevention of mosquito bites and chemoprophylaxis. Vaccines: lines of research

LESSON 17. African Trypanosomiasis (sleeping sickness). American Trypanosomiasis (Chagas Disease) . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 18. Visceral Leishmaniasis . Cutaneous Leishmaniasis . Mucocutaneous Leishmaniasis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 19. Toxoplasmosis . Geographical distribution. Etiological agents: morphology and cycle. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

LESSON 20. Meningoencephalitis and keratitis caused by free living amoebae. Etiological agents: morphology and cycle. Geographical distribution. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

MODULE 9. Arthropoda infections.

LESSON 21. Pediculosis. Tungiasis. Myiasis. Scabies . Etiological agents: morphology and cycle. Geographical distribution. Pathogenesis. Clinical manifestations. Complications. Diagnosis. Treatment. Epidemiology, control and prevention.

Practical classes : laboratory practice and visualization and discussion of films about parasitic diseases.

Seminars: Based on solving clinical cases in order to relate theoretical and practical concepts.

26781 - Tropical Parasitic Diseases

Tutorial activity: Individuals or in group .

Didactical support material will be available in the web of the subject in the ADD Moodle Platform.

5.4.Planning and scheduling

Dates classroom sessions: See notice board of the center or ADD

Delivery date of works: See section "Key Dates subject" of this Guide

5.5.Bibliography and recommended resources

- Clavel A, Varea M, Goñi P y col. 2ª Ed. 2009. Guía para el diagnóstico de las enfermedades parasitarias. Ed. KRONOS.

- Adroher, F.J.; Campos, M.; Hueli, L. (coord.). 2004. Guía Práctica de Parasitología. Facultad de Farmacia. Universidad de Granada. 175 pp.

- Ash, Lawrence R.. Atlas de parasitología humana / Lawrence R. Ash, Thomas C. Orihel. - 5ª ed. Buenos Aires ; Madrid [etc.] : Editorial Médica Panamericana, 2010

- Parasitología Clínica de Craig Faust / [Paul Chester Beaver, Rodney Clifton Jung, Eddie Wayne Cupp]. - 3ªed. / revisada por Jorge Tay Zavala, Manuel Gutiérrez Quiroz, Yolanda García Yáñez México ; Barcelona [etc] : Masson Doyma México, D.L. 2003

- Cook, G.; Zumla, A. (eds). 2009. Manson's tropical diseases. 22 nd Ed. 1830 pp

- Cordero del Campillo, M. y col. 2007. Parasitología General. MacGraw-Hill Interamericana. 162 pp.

- Enfermedades infecciosas tropicales / editado por, Richard L. Guerrant, David H. Walker, Peter F. Weller Madrid : Harcourt, cop. 2002

- Schmidt, Gerald D.. Gerald D. Schmidt & Larry S. Roberts' Foundations of parasitology / Larry S. Roberts, John Janovy, Jr. . - 5th ed. Dubuque [etc.] : Wm.C. Brown Publishers, cop. 1996

Web Links :

<http://www.who.int/es/index.html>

<http://www.who.int/tdr/>

<http://www.dpd.cdc.gov/dpdx/>

<http://pathmicro.med.sc.edu/book/parasit-sta.htm>

26781 - Tropical Parasitic Diseases

<http://www.cdfound.to.it/>

<http://www.diplectanum.talktalk.net/purls/>