Parasitology

Lectures: 2 hours/week for 7 weeks Total: 14 hours

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| Lecture | Topic | ILOs |
| 1 | Introduction to parasitology I(definitions and terminology)A13.1, A14.1,A15.1, B9.1 | * Define the different terms of medical parasitology.
* State parasitism and host-parasite relationship.
* List the different types of hosts.
* Explain host-parasite relationships.
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| 2 | Introduction to parasitology I(methods of infection and stages)A16.1, A17.1,A18.1B8.1, B9.1 | * List the sources of parasitic infections.
* Memorize the methods of infection of common parasites.
* Recall the infective and diagnostic stages of common parasites.
* Demonstrate different types of parasitic infections.
* Explain host-parasite relationships.
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| 3 | Introduction to PlatyhelminthesA14.2, A18.2, A17.2B8.2, B9.2 | * Identify general life cycle of trematodes and cestodes.
* Recall and differentiate the infective and diagnostic stages of common trematodes and cestodes.
* Memorize common symptoms of infection with Platyhelminthes.
* Demonstrate different types of Platyhelminthes infections.
* Explain host-parasite relationships in Platyhelminthes.
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| 4 | Introduction to NematodesA14.3, A17.3, A18.3B8.3, B9.3 | * Identify general life cycle of common nematodes.
* Recall and differentiate the infective and diagnostic stages of common nematodes.
* Memorize common symptoms of infection with nematodes.
* Demonstrate different types of nematodes infections.
* Explain host-parasite relationships in nematodes.
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| 5 | Introduction to ProtozoaA14.4, A17.4, A18.4B8.4, B9.4 | * Identify medically important protozoa.
* Understand life cycle’s needs for common protozoa.
* Recall and differentiate the infective and diagnostic stages of common protozoa
* Demonstrate different types of protozoal infections.
* Explain host-parasite relationships in protozoa.
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| 6 | Introduction to Medically important arthropods IA15.2, A15.3, A16.2,A18.5, B9.5 | * List arthropods that act as vectors of diseases to human.
* Memorize morphology of medically important arthropods.
* List diseases transmitted by arthropods.
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| 7 | Introduction to Medically important arthropods II and Immunoparasitology.A16.3, A19.1B8.4, B9.6, B11 | * List the role of arthropods in parasitic global health problems.
* Mention principles of immunoparasitology.
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Practical: 2 hours/week for 7 weeks Total: 14 hours

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| session | Topic | ILOs |
| 1 | Stool analysis(direct smear)C1.1,C7.1, B10.1 | * Handle the microscope.
* Operate routine techniques used in medical parasitology.
* Differentiate parasitic stages.
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| 2 | Introduction to Platyhelminthes(trematodes)C1.1, C6.1, A18.1 | * Handle the microscope.
* Identify the infective and diagnostic stages of common trematodes under microscope
* Recall the infective and diagnostic stages, and adults of common trematodes.
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| 3 | Introduction to Platyhelminthes(cestodes)C1.1, C6.1, A18.2 | * Handle the microscope.
* Identify the infective and diagnostic stages of common cestodes under microscope
* Recall the infective and diagnostic stages, and adults of common cestodes.
 |
| 4 | Introduction to NematodesC1.1, C6.1, A18.3 | * Handle the microscope.
* Identify the infective and diagnostic stages of common nematodes under microscope
* Recall the infective and diagnostic stages, and adults of common nematodes.
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| 5 | Giemsa’s StainingC1.1, C6.1, C7.2 | * Handle the microscope.
* Identify the infective and diagnostic stages of malaria, Toxoplasma and filarial worms.
* Operate routine techniques used in medical parasitology.
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| 6 | Intestinal protozoaC1.1, C6.1 | * Handle the microscope.
* Identify the infective and diagnostic stages of common protozoa under microscope.
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| 7 | Medically important arthropods C1.1, A15.2, A15.3, A16.2 | * Handle the microscope.
* Identification of medically important arthropods.
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Group discussion: 1 hours/week for 7 weeks Total: 7 hours

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| Lecture | Topic | ILOs |
| 1 | Bilharziasis D1-D10A16.1, A17.1,A18.1 | * General skills are stated early in the block.
* State general life cycle of *Schistosoma*.
* List different stages of Schistosoma.
* List community impact of Bilharziasis.
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| 2 | Zoonotic parasitic diseasesD1-D10A13.1, A14.1, A17 | * General skills are stated early in the block.
* Define the term zoonosis.
* List zoonotic parasitic diseases.
* Memorize diagnostic and infective stages.
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| 3 | Autoinfection in parasitic diseasesD1-D10A13.1, A14.1, A17B9, B10,B11 | * General skills are stated early in the block.
* Define the term autoinfection.
* List parasitic diseases in which autoinfection can occur.
* Memorize diagnostic and infective stages.
* Explain host-parasite relationships.
* Differentiate between the infective and diagnostic stages of different parasites
* Interpret the immune response to the parasitic infection.
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| 4 | Life threatening nematode infectionD1-D10A14.3, A17.3, A18.3B8.3, B9.3 | * General skills are stated early in the block.
* List nematodes causing chronic diarrhea.
* Memorize diagnostic and infective stages.
* Demonstrate different types of nematodes infections.
* Explain host-parasite relationships in nematodes.
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| 5 | CryptosporidiosisD1-D10A14.4, A17.4, A18.4B8.4, B9.4 | * General skills are stated early in the block.
* Describe life cycle of *Cryptosporidium*.
* Memorize diagnostic and infective stages.
* Demonstrate different types of *Cryptosporidium* infections.
* Explain host-parasite relationships.
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| 6 | Mosquito transmitted diseases.D1-D10A15.2, A15.3, A16.2,A18.5, B9.5 | * General skills are stated early in the block.
* List different genera of mosquitoes.
* List diseases transmitted by mosquitos.
* Describe role of mosquitos in arboviruses epidemics.
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| 7 | Eosinophilia in parasitic diseases.D1-D10A19.1,B11 | * General skills are stated early in the block.
* List parasites causing eosinophilia.
* Interpret the role of eosinophils in immunoparasitology.
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Seminars: 1 hour/week for 7 weeks Total: 7 hours

* It will be dedicated to cover and answer unclear points of lectures and group discussion topics.

Cases: 1 hour/ case proposed 3rd and 6th weeks Total: 2 hours

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| Case  | Topic  | ILOs |
| 1 | A case of hepatosplenomegalyB8, B9, B10 | * Demonstrate different parasites causing hepatosplenomegaly.
* Explain host-parasite relationships.
* Differentiate between the infective and diagnostic stages.
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| 2 | A case of diarrheaB8, B10, A16 | * Demonstrate different parasites causing diarrhea.
* List the sources of parasitic infection.
* Differentiate between the infective and diagnostic stages.
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Self-directed learning: 1 hour/ session proposed and weeks Total: 2 hours

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| Case  | Topic  | ILOs |
| 1 | Culture in parasitic infectionsD1-D10B8, B10, A18 | * General skills are stated early in the block.
* Demonstrate different culture techniques for parasites.
* Differentiate between the infective and diagnostic stages.
* Recall infective and diagnostic stages.
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| 2 | Staining techniques for stool examinationD1-D10A17, A18 | * General skills are stated early in the block.
* List different stains that can be used in stool examination.
* mention advantages and disadvantages.
* Recall diagnostic stages.
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