



LEAD CITY UNIVERSITY, IBADAN.

FACULTY OF BASIC MEDICAL & APPLIED SCIENCES

DEPARTMENT OF BIOLOGICAL SCIENCES

SECOND SEMESTER, 2017/2018 ACADEMIC SESSION

COURSE PARTICULARS

Units: 3

Status: Compulsory

Course Code: ZOO 312

Course Title: Biology of Tropical Parasites

LECTURERS DETAILS

Name: Agboola, A.O

Qualifications: M.Sc., M.Phil (Parasitology)

Phone: 0810-968-6353

Email: agboolagunju@gmail.com

Area of Specialization: Zoology, Public Health Parasitology

Name : Adegbehingbe K.O

Qualifications: B.Sc. Biology , M.Sc. Zoology (Parasitology)

Phone : 08068043821

Email: giftsola2011@yahoo.com

Area of Specialization: Public-Health Parasitologist & Biologist.

Name : Umezurike E.

Qualifications: B.Sc. Microbiology , Msc. Epidemiology

Phone : 08135939991

E-mail: Umezurikee @yahoo.com

Area of Specialization: Medical Microbiology and Public Health.

Course Objectives: The students should be able to describe the habitat, give a detailed classification of the parasites to the species level, epidemiology, morphology, life cycle, transmission, pathogenesis, immunological responses of the host and control of the selected parasitic diseases.

Course Requirement/Assessment:

Continuous Assessment Test 40%

Terminal Examination 60%

Total 100%

Recommended text: Otubanjo, O.A. (2012) Parasites of Man and Parasites Panaf Publishing Inc. Abuja 196pp

Ukoli, F.M.A. (1990). Introduction to parasitology in Tropical Africa. Texflow Limited, Ibadan. 462pp

Teaching Plan

WEEK	CONTENT
1	Introduction to Tropical Parasitic Diseases
2	Classification of Parasitic diseases
3	Nematodes: Schistosome and Schistosomiasis
4	Phylum Apicomplexa :Tissue invading Sporozoa: <i>Toxoplasma</i> and Toxoplasmosis
5	Blood invading Sporozoa: Babesia and Babesiosis, <i>Plasmodium</i> and Malaria,
6	Intestinal Sporozoa: <i>Coccidia</i> and Coccidiosis
7	Intestinal Flagellates: Giardia and Giardiasis
8	Haemoflagellates: <i>Leishmania</i> and Leishmaniasis
9	Subphylum Mastigophora: The Trichomonads.
10	10 Human Intestinal worms- <i>NecatorAmericanus</i>
11	Human Intestinal worms- <i>AncylostomaDuodenale</i>
12	Guinea worm Infection- <i>DracunculusMedinensis</i>
13	Trypanosomiasis

Tutorial Questions

Section A

1. Attempt a description of the epidemiology of schistosomiasis in Nigeria.
2. Explain the role of Water, Sanitation and personal Hygiene in the persistence of Neglected Tropical Diseases.
3. Explain the life cycle of *Schistosoma haematobium*, identifying the infective stages as well as the opportunities of control.
4. You are a member of an investigative team to Eggua community in Yewa North LGA, how will you help them reduce or eradicate schistosomiasis?

Section B

5a. Describe the morphology and life cycle of Human Malaria.

- b. Enumerate four factors which promote epidemiology of malaria infection.
- c. State four obstacles which prevent eradication and resurgence of malaria infection

6a. The host immunity plays a critical role in pathogenicity of Malaria infection. Discuss.

- b. Describe the mode of transmission of *Toxoplasma gondii*.
- c. Mention four sources of infection of Human Toxoplasmosis.

7 a. Carefully elucidate the role of immunity in Toxoplasmosis infection.

- b. Discuss why *Trichomonas vaginalis* is cosmopolitan and exhibit a high global prevalence.
- c. Describe the mode of transmission and control of Trichomoniasis.

SECTION C

8. a. The pathology of *Necator Americanus* is divided into stages explain the stages.

- b. Describe the Lifecycle of *Necator Americanus* with an appropriate diagram.

9. a. Describe the morphology of Guinea worm.

b. Explain the lifecycle of guinea worm along with the treatment for Guinea worm infection.

10. a. Explain the life cycle of *Trypanosoma Gambiense* as well as the morphology of the worm.

- b. List the symptoms of trypanosomiasis, its vectors as well as the routes of entry.