



**EDO UNIVERSITY IYAMHO**  
**DEPARTMENT OF MEDICAL LABORATORY SCIENCE**  
**MLS 305: INTRODUCTION TO MEDICAL LABORATORY SCIENCE III**



**Instructor:** *Dr. Oladeinde Bankole Henry*, email-oladeinde.bankole@edouniversity.edu.ng  
Lectures: Monday, 10.00am ó 12.00 pm, LT5, phone: (+234) 8053096120  
Office hours: Monday, 8.00 am ó 9.00 am. Office:: College Building, Room 38

**General overview of lecture:** This course is structured to provide students with the basic knowledge of Medical Parasitology. The lectures will x-ray the various relationships that exist between parasites and host, with specific examples outlined. Protozoan and helminthes of medical importance will be discussed with emphasis on their life cycles, mode of transmission, pathogenesis and method of diagnosis. The biology of certain arthropods (vectors) in relation to transmission dynamics of parasites will also form a core of this course.

**.Prerequisites:** Students should have a basic knowledge of classification of living things as well as the structure and function of component parts of a living cell. Knowledge of the infectious disease process is also necessary for proper understanding of the content of this course.

**Learning outcomes:** At the completion of this course, students are expected to be able to:

- i. Define what a parasite is, and list the different types of host for parasites
- ii. Discuss the relationships that exist between parasites and hosts
- iii. List and explain factors that promote the transmission of parasitic agents
- iv. Discus the classification, and life cycle of some medically important parasites
- v. Discuss how the structure and biology of arthropods aid in spread of parasitic infections

**Assignments:** We expect to have 5 individual homework assignments throughout the course in addition to a Mid-Term Test and a Final Exam. Home works are due at the beginning of the class on the due date. Home works are organized and structured as preparation for the midterm and final exam, and are meant to be a studying material for both exams..

**Grading:** We will assign 5% of this class grade to homework, 5% to class presentations, 20% for the mid-term test and 70% for the final exam. The Final exam is comprehensive.

**Textbook:** The recommended textbook for this class is as stated:

Title: *Medical Parasitology*

Author/s: Satoskar Abhar, Simon Gary, Hotez Peter, Tsuji Moriya

Publisher: LANDES Bioscience

ISBN: 978-1-57059-695-7

**Title:** *Hugo and Russells Pharmaceutical Microbiology, 7<sup>th</sup> Edition*  
**Authors:** Denyer Stephen, Hodges Norman, Gorman Sean,  
**Publisher:** Blackwell Science  
**ISBN** 0663260646766

**Courseware: MLS 305- Introduction to Medical Laboratory Science III (3 UNITS)**

The following outlines the courseware for the course MLS 311, Introduction to Medical Laboratory Science III,

- Introduction to parasitism, and other animal associations
- Adaptation to parasitic way of life.
- Mechanism of host invasion by parasite
- The ineffective agents of parasites.
- Basic knowledge of structure, classification and life cycle of parasites of medical importance
- Vectors and intermediate hosts of parasites.
- Introduction to arthropods of medical importance.
- Biology of the mosquito in relation to the transmission of malaria, filariasis and viral infections.