

# Lesson plan

**Discipline** : **DMLT**

**Semester** : **3rd**

**Subject** : **Clinical Microbiology III**

**Lesson Plan Duration:** **15 weeks (from October, 2021 to January, 2022)**

**Work load ( Lecture / practical ) per week ( n hours) = Lecture=3, Practical=6**

WORK	THEORY		Practical	
	Lecture Day	Topic (Including assignment/test}	Practical Day	Topic
1 <sup>st</sup>	1	Introduction to medical parasitology	L1	Collection and routine stool examination for detection of intestinal parasites by Saline preparation
	2	General characteristics, morphology of Protozoa		
	3	Classification of Protozoa		
2 <sup>nd</sup>	4	General characteristics, morphology of Helminthes	L2	Collection and routine stool examination for detection of intestinal parasites by Iodine preparation
	5	classification of Helminthes		
	6	Collection, transportation, processing and preservation of blood sample for routine investigations		
3 <sup>rd</sup>	7	Collection, transportation, processing and preservation of stool sample for routine investigations	L3	Collection and routine stool examination for detection of intestinal parasites by Floatation method (saturated salt solution/zinc sulphate)
	8	Introduction about Concentration techniques		
	9	- Principle and application of concentration techniques(floating techniques)		
4 <sup>th</sup>	10	Simple floating technique	L4	Collection and routine stool examination for detection of intestinal parasites by Centrifugation method (formal ether)
	11	DCF technique		
	12	Sedimentation techniques( simple )		
5 <sup>th</sup>	13	Sedimentation techniques( formalin ether )	L5	Identification of Tapeworm from preserved specimen/slides
	14	Introduction about Giardia and Morphology of Giardia		

	15	Life cycle and Lab diagnosis of Giardia		
6 <sup>th</sup>	16	Morphology and Life cycle of Entamoeba histolytica	L6	Identification of Roundworm from preserved specimen/slides
	17	Lab diagnosis of Entamoeba histolytica		
	18	Morphology and Life cycle of Ancylostoma		
7 <sup>th</sup>	19	Life cycle and Lab diagnosis of Ancylostoma	L7	Identification of Hookworm from preserved specimen/slides
	20	Morphology of Ascaris lumbricoides		
	21	Life cycle and Lab diagnosis of Ascaris lumbricoides		
8 <sup>th</sup>	22	Assignment	L8	Identification of Pinworm from preserved specimen/slides
	23	Morphology and life cycle of T solium,		
	24	Lab diagnosis T solium,		
9 <sup>th</sup>	25	Morphology and life cycle of T saginata	L9	Identification of Trichomonas vaginalis from preserved specimen/slides
	26	Lab diagnosis T saginata		
	27	Introduction about Malarial Parasite		
10 <sup>th</sup>	28	Morphology of P. Vivax	L10	Preparation of stains (Leishman, Giemsa, Field)
	29	Life cycle of P. Vivax		
	30	Lab diagnosis of P. Vivax		
11 <sup>th</sup>	31	Morphology of P. Falciparum	L11	Preparation of thin and thick smears
	32	Life cycle of P. Falciparum		
	33	Lab diagnosis of P. Falciparum		
12 <sup>th</sup>	34	Assignment	L12	Staining of smears by Leishman, Giemsa, Field
	35	Introduction about Virology		
	36	General Characteristics of virus		
13 <sup>th</sup>	37	Structure of viruses.	L13	Examination of smears for malarial parasite (P. vivax)
	38	Classification of virus		
	39	Lab diagnosis and prevention of – - Rabies - Polio		
14 <sup>th</sup>	40	Lab diagnosis and prevention of – HIV .HBV (Hepatitis 'B' virus)	L14	Examination of smears for malarial parasite( P. falciparum)
	41	Introduction about Virological Samples		

		- Collection of Virological Samples - Transportation - Storage		
	42	Transportation of virological samples		
15 <sup>th</sup>	43	Storage of virological samples	L15	Demonstration of various stages of malarial parasite from stained slides
	44	Assignment		
	45	Test		