

# Lesson plan : Zoology General Courses

**Semester – III & V**

Session – July- December 2020



2020

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## Semister- III

### Lesson Plan for Course:Insect, Vectors and Diseases, Code: ZOOGCOR03T, Credit: 4

Course coordinator:Uday Hossain

#### Course Outcome

- ✓ CO1:To gain Knowledge about various insects and their characteristics.
- ✓ CO2:To understand mechanism of transmission of various diseases causing parasite via insects.
- ✓ CO3: It helps to improve awareness among students regarding disease transmitting insects and how to prevent spread and transmission of disease.

#### Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
Jul	<b>Unit 1:Introduction to Insects</b>	UdayHossain		
	General Features of Insects		1	Theoretical, Powerpoint
Aug	<b>Unit 1:Introduction to Insects</b>	UdayHossain		
	Morphological features, Head – Eyes		1	Theoretical, Powerpoint,
	Types of antennae,		1	Theoretical, Powerpoint,
	Mouth parts with respect to feeding habit		2	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Class test</b>		1	QUIZ in Google

				classroom
	<b>Unit 2: Concept of Vectors</b>	UdayHossain		
	Brief introduction to Vectors (mechanical and biological),		1	Theoretical, Powerpoint
	Reservoirs, Host-vector relationship		2	Theoretical, Powerpoint
	Adaptations as vectors		1	Theoretical, Powerpoint
	Host specificity		1	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Class Test</b>		1	QUIZ in Google classroom
Sep	<b>Unit 3: Insects as Vectors</b>	UdayHossain		
	Detailed features of insect orders as vectors – Diptera		2	Theoretical, Powerpoint
	Detailed features of insect orders as vectors – Siphonoptera,		1	Theoretical, Powerpoint
	Detailed features of insect orders as vectors – Siphunculata,		1	Theoretical, Powerpoint
	Detailed features of insect orders as vectors – Hemiptera		2	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Class test</b>		1	QUIZ in Google classroom
	<b>Unit 4: Dipteran as Disease Vectors</b>	UdayHossain		
	Study of important Dipteran vectors – Mosquitoes, Sand fly, Houseflies		3	Theoretical, Powerpoint
			1	Theoretical, Powerpoint
				Theoretical, Powerpoint
Oct	<b>Unit 4: Dipteran as Disease Vectors</b>	UdayHossain		Theoretical, Powerpoint
	Study of mosquito-borne diseases – Malaria, Dengue, Chikungunya, Viral encephalitis, Filariasis Control of mosquitoes		3	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Class test</b>		1	QUIZ in Google classroom

	<b>Unit-5 Siphonaptera as Disease Vectors</b>	UdayHossain		
	Fleas as important insect vectors		1	Theoretical, Powerpoint
	Host-specificity		1	Theoretical, Powerpoint
	Study of Flea-borne diseases – Plague, Typhus fever; Control of fleas		1	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Assessment: Mid-term Test</b>			ONLINE
Nov	<b>Unit-5 Siphonaptera as Disease Vectors</b>	UdayHossain		
	Study of Flea-borne diseases – Plague, Typhus fever; Control of fleas		1	Theoretical, Powerpoint
	<b>Class Test</b>		1	QUIZ in Google classroom
	<b>Unit-6 Siphunculata as Disease Vectors</b>			
	Human louse (Head, Body and Pubic louse) as important insect vectors		1	Theoretical, Powerpoint
Dec	<b>Unit-6 Siphunculata as Disease Vectors</b>	UdayHossain		
	Human louse (Head, Body and Pubic louse) as important insect vectors		1	Theoretical, Powerpoint
	Control of human louse		1	Theoretical, Powerpoint, suggestive question in google classroom
	<b>Class test</b>		1	QUIZ in Google classroom
	<b>Unit-7 Hemiptera as Disease Vectors</b>	UdayHossain		
	Bugs as insect vectors		1	Theoretical, Powerpoint
	Blood-sucking bugs; Chagas disease		1	Theoretical, Powerpoint
	Bed bugs as mechanical vectors		1	Theoretical, Powerpoint
	Control and prevention measures		1	Theoretical, Powerpoint, suggestive question in google classroom

	<b>Class Test</b>		1	QUIZ in Google classroom
	<b>Assessment: End-term Test</b>		Total: 40 Hrs	ONLINE

#### Resources :

1. Books: Graduation Zoology for WBSU (Ghosh and Santra), Essential Medical Parasitology (Apurba S. Sastry)
2. Other resources :Wikipedia, YouTube video link, ebooks

## Semester - V

### Lesson Plan for Course: Applied Zoology, Code...ZOOGDSE01T. Credit: 06.

Course coordinator: Subharaj Paul

#### Course Outcome

- **CO1:**In this DSE course component, students can learn about the different animal interaction, emphasizing on the influence of parasitism.
- **CO2:**To understand the Epidemiology of Diseases.
- **CO3:**To know about the different group of parasite and their life cycle and pathogenesis.
- **CO4:**To learn about the pest and pest management.
- **CO5:** Students can also learn about livestock industry, their problem and management.

#### Course planner

Sl	Course Topic	Teacher	Class-hour	Remarks*
Jul	<b>Unit-1</b> Host, Definitive host, Intermediate host, Parasitism,	SP	01	Online lecture method and PPT presentation, youtube animation.
Aug	Symbiosis, Commensalism,	SP	01	
	Reservoir, Zoonosis	SP	01	
	<b>Schedule for Class Exam on 28<sup>th</sup> Aug on Unit-1 in Google classroom.</b>		<b>01</b>	<b>Qu-answer method</b>
	<b>Unit-2:</b> Transmission, Prevention and control of diseases: Tuberculosis,	SP	04	Provide pdf material.
	Typhoid.	SP	03	
	<b>Unit-3</b> Brief account of <i>Rickettsia prowazekii</i> ,.	SP	01	
	<i>Borrelia recurrentis</i> and	SP	01	
	<i>Treponema pallidum</i>	SP	01	
Sep	<b>Unit-5:</b> Life history and pathogenicity of	SP	02	

	<i>Ancylostomaduodenale</i> and			
	<i>Wuchereriabancrofti</i>	SP	02	
	<b>Schedule for Class Exam on 05<sup>th</sup>Sept on Unit-5 in Google classroom.</b>		<b>01</b>	<b>Qu-answer method</b>
	<b>Unit-4:</b> Life history and pathogenicity of <i>Entamoebahistolytica</i> ,	SP	02	
	<i>Plasmodium vivax</i> and	SP	02	
	<i>Trypanosomagambiense</i>		02	
	<b>Schedule for class Exam on 25<sup>th</sup>Sept on Unit-4 in Google classroom.</b>		<b>01</b>	<b>Qu-answer method</b>
	<b>Assessment: Mid-term Test</b>			
Oct	<b>Unit-6</b> Biology, Control and damage caused by <i>Helicoverpaarmigera</i> ,	SP	02	
	<i>Pyrillaperpusilla</i> and	SP	01	
	<i>Papiliodemoleus</i> , <i>Callosobruchuschinensis</i> ,	SP	03	
	<b>Schedule for class exam on 19<sup>th</sup>Oct on Unit-6 in Google classroom.</b>		01	Qu- Answer method.
				Oct 22 <sup>nd</sup> to 17 <sup>th</sup> Nov
				Puja vacation.
Nov	<i>Sitophilusoryzae</i> and <i>Triboliumcastaneum</i>	SP	02	
	<b>Unit-7:</b> Medical importance and control of <i>Pediculushumanuscorporeis</i>	SP	01	
Dec	<i>Anopheles</i> , <i>Culex</i> , <i>Aedes</i> ,	SP	03	
	<i>Xenopsyllacheopis</i>	SP	01	
	<b>Unit-8:</b> Preservation of semen and artificial insemination in cattle.	SP	01	
	<b>Unit-9:</b> Principles of poultry breeding, Management of breeding stock and broilers, Processing and preservation of eggs.	SP	02	
	<b>Unit-10:</b> Genetic improvements in aquaculture industry; Induced breeding and transportation of fish seed	SP	01	
	<b>Assessment: End-term Test</b>		Total: 44 Hrs	

#### Resources:

- Books: Parasitology by K D Chatterjee.
- Other resources:different website source such as Wikipedia, youtube etc.

