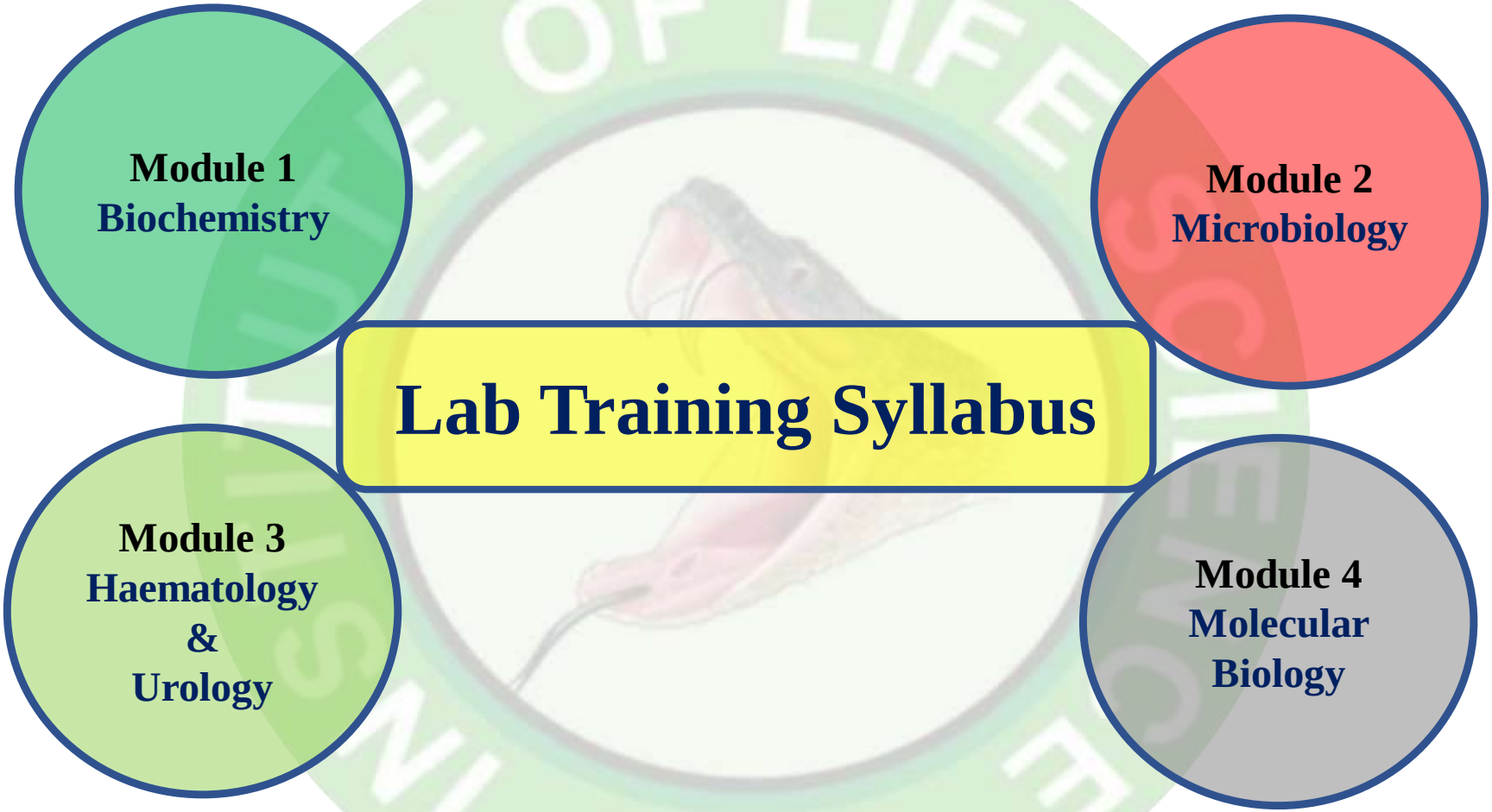
INSTITUTE OF LIFE SCIENCE



Module 2: Microbiology

Duration: 15 Days, Fee: 3,500 + GST

1. General and Safety Instructions for Working in Microbiology Lab.
2. Bio-Instrumentation for Wet Lab.
3. Good Laboratory Practices.
4. Principle and Handling of Laboratory Equipments.
5. Process of Sterilization and Decontamination.
6. Gram staining / differential staining
7. Preparation of PDA media
8. Preparation of LB media
9. Fermentation of different fruits
10. Urine and fecal culture by
11. (a) Streaking method
12. (b) Suspension method
13. Fungal culture and isolation
14. Microbe counting by hemocytometer
15. Demonstration of yeast fission septum by using calcofluor
16. Isolation of fungi from bread
17. Study of different soil microbes

Module 2: Microbiology

Duration: 30 Days, Fee: 5,500 + GST

1. General and Safety Instructions for Working in Microbiology Lab.
2. Good Laboratory Practices.
3. Principle and Handling of Laboratory Equipments.
4. Bio-Instrumentation for Wet Lab.
5. Working with Autoclave, Hot-Air Oven, Laminar Air Flow, Microscope and other Microbiological Laboratory Instruments.
6. Handling of Micropipettes, Petri plates, Spreaders, Inoculation Loop and other Microbiological Tools.
7. Process of Sterilization and Decontamination.
8. Gram staining / differential staining
9. Endospore Staining.
10. Identification and Classification of Microbes.
11. Preparation of Cotton Plug, Plugging for Bacterial Cultures.
12. Sterilization Process.
13. Preparation of PDA media
14. Preparation of LB media
15. Fermentation of different fruits
16. Isolation and Culturing of Microbes from Soil Sample (Through Serial Dilution Method).

16. Isolation and Culturing of Microbes from Water Sample (Through Serial Dilution Method).

17. Biochemical Tests.

(A) Catalase Test.

(B) Mannitol Fermentation Test.

(C) VP Test etc.

18. Urine and fecal culture by

(a) Streaking method

(b) Suspension method

19. Fungal culture and isolation

20. Microbe counting by hemocytometer

21. Demonstration of yeast fission septum by using calcofluor

22. Isolation of fungi from bread

23. Study of different soil microbes