MANGALORE UNIVERSITY

Department of Biosciences
MSc Biosciences

BSP 510 ECOTOXICOLOGY LAB

Course Outcomes:

After successful completion of the course, students will be able to:

- Gain the knowledge how toxicology and ecology are integrated.
- Know what all safety measures to be taken in laboratories.
- Know how to determine acute and chronic toxicities through bioassays.
- Become skilled conducting experiments on solid wastes.
- Know how to estimate oil and grease in water sample.
- Discern clean and polluted water.\
- Know how to perform the spot test for detection of metals and other toxic pollutants.
- Become expert how to detect food adulteration.
- Observe and realize the impact of metal on plant germination and growth.
- Gain a practical knowledge how to perform GC analysis for food samples for pesticide residues.

1. Good Laboratory Practices
2. Safety notices in environmental toxicological studies.
3. Bioassay experiments using different test systems.
4. Behavioural study of the fish under exposure to toxicants.
5. Experiments on solid waste
6. Estimation of oil and grease in water sample.
7. Demonstration of catalase activity in polluted waters.
8. Spot test for detection of metals, residual chlorine, nitrite poisoning, fluoride toxicity food adulterants and pesticide residues.
9. Effect of $CdCl_2$ on germination of Bengal gram.
10. Effect of toxicants in meristematic tissue (Onion root tips).
11. GC analysis of pesticide residues in food samples.