

University of Pune
Department of Environmental Science
Ph.D. Course Work in Environmental Science
To be implemented from the Academic year 2010-2011

Note :

1. Each course consists of 5 credits
2. Examination will be held at the end of the year.
3. Grades will be awarded in Result Sheet of the candidate.
4. Mode of study includes selection of the topic by the students in consultation with the guide, submitting the Write up on the selected topic which will be followed by seminar and discussion. The evaluation will be done by the expert in the related field.

Ph.D. EVS 101 Research Methodology

5 Credits

Analytical Techniques: Any Four

(2 Credits)

Principle, Instrumentation, Application, Analysis and Interpretation of the data for the following techniques

UV-Visible Spectroscopy, Gas Chromatography, HPLC, Thermal Analysis, Physico-Chemical techniques for Environmental analysis, Nuclear analytical techniques, Statistical methods of analysis, Air pollution and monitoring techniques.

Analysis for Environmental Samples

(1 Credit)

Scientific Writing :

(1 Credit)

Writing Skills, Project proposals, Research paper writing.

Setting of lab for experimental work and related safety measures. (1 Credit)

Ph.D. EVS 102 Advances on Environmental Science

10 Credits

Part I

Any two topics to be opted.

1. Bioremediation of degraded ecosystem
2. GIS and Remote sensing
3. EIA/Environmental Audit
4. Biomedical waste management

5. Watershed management
6. Environmental Education and Awareness

Part II

(5 Credits)

Any two topics to be opted

1. Climate change, carbon credits and carbon sequestration
2. Biodiversity types, assessment and conservation
3. GMO-Environmental implications
4. Advances in wastewater treatments

Ph.D. EVS 103 Guide's course

5 Credits

Concern Guide will assign the topics for review writing and seminar. The topics for review and seminar will be other than Ph.D. topic. The review is to be submitted and evaluated by the experts. Students also have to give presentation on it. Minimum 2 Presentations are to be given.