

ENSE 654 ECOPHYSIOLOGY AND ECOTOXICOLOGY

(Credits 04)

OBJECTIVE

To recognize the concept and mechanisms of ecophysiology and ecotoxicology and apply them for well-being of ecosystems and humans

SYLLABUS

Ecophysiology: The concept and its development; Physiological stresses and ecological responses; Rhythms; Relationships of different organs to environmental factors in animals; Ecological inferences; Allelopathy-The concept, mechanisms and applications; High altitude environment and human responses

Ecotoxicology: Origin and significance; Toxicants-types, nature, significance and toxic effects; Toxicants in earth environment; Fate of toxicants- Exposure, transport and biochemical transformation

SUGGESTED READINGS

Allelopathy- E.L. Rice, Academic Press, New York.

Ecology, Environment and Resource Conservation- J.S. Singh, S.P. Singh and S.R. Gupta, Anamaya Publications, New Delhi.