



# MANGALORE UNIVERSITY

## Department of Biosciences MSc Environmental Science

**ESS504 ENVIRONMENTAL IMPACT ASSESSMENT**

**39 hrs.**

### Course Outcomes:

CO1 Discuss the importance of environmental impact assessment in industrialization and other environmental activities.

CO2 Describe the meaning of sustainable development.

CO3 Learn the methodology of environmental audit in India.

CO4 Learn types of impacts.

### UNIT I (13 hours)

Environmental Impact Assessment - Definition, aim, components, methods and significance of impact assessment with case studies - Surveillance and monitoring, environmental conflicts. Preparation of impacts: Negative and positive impacts, primary and secondary impacts; impacts on physical, social and cultural aspects.

### UNIT II (13 hours)

Sustainable development, unavoidable impacts, alternative strategies. Integrated approach for environmental quality. Prediction of changes in the specific environmental components (air, water, noise, cultural, flora and fauna, socio-economic) due to projects, policies and planning, project implementation, national and international agencies involved in impact assessment studies.

### UNIT III (13 hours)

Need for environmental impact assessment in industrialization, agricultural activities, urbanization, energy utilization-over exploitation. Environmental auditing - Definition, objectives, types, components, methodology, benefits, environmental audit in India. Applications and management of Environmental Impact Assessment.

### References:

1. Hosetti, B.B. and Arvind Kumar. Environmental Impact Assessment and Management, Daya Publishing House, Delhi (1998)
2. Hommadi, A.H. Environmental and Industrial safety. Indian Bibliographics Bureau, Delhi (1990)
3. Hufschmidt, M.M. Environment, Natural Systems and Development – An Economic Valuation Guide, John Hopkins University Press, London(1983)
4. Munn, R.E. Environmental Impact Assessment, Scope 5(1989)
5. Patrick Dixon & Johan Gorecki. Sustainability, 1<sup>st</sup> Edition (2010)
6. PetterMoris and RikiTherivel. Methods of Environmental Impact Assessment, 3<sup>rd</sup> Edition, Taylor & Francis Groups (2009)

7. Rau, J.G. and Woefen, D.C. Environmental Impact Analysis Handbook (1980)
8. Shrivastava, A.K. Environment Impact Assessment, A.P.H Publishing Corporation, New Delhi (2003)
9. Valli Manickan and Anjaneyalu, M. Environmental Impact Assessment – Methodologies., B.S. Publication (2011)

