Semester:	5			
Course Code:	ENCM 31712			
Course Name:	Environmental Economics			
Credit Value:	2			
Status:	Compulsory			
Pre-requisites:	ENCM 12742			
Co-requisites:	None			
Hourly Breakdown:	Theory	Practical	Independent Learning	
	30	-	70	

## **Intended Learning Outcomes:**

After completion of this course unit, the student will be able to;

- 1. explain the basic theories and concepts of economics and environmental economics,
- 2. determine optimal pollution levels and solutions for pollution externalities,
- 3. discuss application of economics in natural resource management,
- 4. describe environmental valuation techniques, and
- 5. apply extended cost benefit analysis framework in project level decision making.

#### **Course Content:**

Basic concepts in economics, fundamentals of economic system, theory of cost and production economics, market forces and surpluses. Economic analysis of projects: static analysis and dynamic analysis, financial and economic analysis of projects and project appraisal.

Market failures: imperfect competition, asymmetric information, public goods, inter and intra generational equity and externalities.

Introduction to environmental and natural resources economics. Economics of natural resources, fishery and forestry economics, introduction to environmental valuation techniques and extended cost benefit analysis.

### **Teaching /Learning Methods:**

A combination of interactive teaching sessions, field studies, computer based learning, self-studies, field based assignments and small group discussions.

# **Assessment Strategy:**

Continuous assessment and end of semester examination. Percentage given for each sub-component indicates the percent contribution to the final marks.

Continuous Assessment		Final Assessment		
30 %		70 %		
Details:	Theory	Practical	Other	
Quizzes 5	70	-	-	
Assignments 25				

#### **Recommended Readings:**

- 1. Brent, R.J. (2006). Applied Cost Benefit Analysis. Edward Elgar, Cheltenham, UK.
- 2. Callen, C.J and Thomas, J.M. (2013). Environmental Economics and Management: Theory Policy and Application, South-Western, Mason.
- 3. Champ, P.A., Boyle, K.J. and Brown. T.C (Ed) (2003). A primer on Non- Market Valuation, Springer Science+Business Media, LLC, New York.
- 4.Field, B.C and Field, M.K. (2017). Environmental Economics: An introduction, McGraw Hill, New York.
- 5. Tietenburg, T. and Lewis, L. (2003). Environmental and Natural Resource Economics. 11th Edition. Routledge, Taylor and Francis, New York.