**SSL 3203 LAND USE IMPACT ASSESSMENT**

Lecturer Dr. Twaha Ali Basamba (B.Sc. For., PG Dip. Soil Survey, M.Sc. N.R.M.., Cert. Pedagogy,

 Cert. Data Analysis, Cert. Gender, Cert. Computer Skills, PhD (Env. Sci))

**Course Type**: **CORE (B.Sc. LUM)**

**Course Credits (CU)**: **2 CU i.e. 30 Contact Hours per semester**

**Course Duration**: **15 weeks (30 hours) i.e. 15 LH, 30 PH**

**1. COURSE DESCRIPTION**

### Introduction. Characteristics of land use impact assessment. Land use impact assessment processes. Quality of a land use impact assessment. Land use impact assessment reports. Land use impact assessment methods. Community and public participation in land use impact assessment and the need for equitable representation by gender and other socio-economic and political groups. Economics of land use impact assessment. Field and documented case studies. Practicals on land use impact assessment in both rural and urban settings.

**2. COURSE OBJECTIVES**

The **overall objective** of this course is to give an overview of the interrelations between the natural environment and human land use

The **specific objectives** are:

1. To facilitate student understanding of the prediction of the impact of human activities on land ecosystems
2. To enable students acquire skills in the methods for assessing the effects of human activities on agricultural land ecosystems
3. To demonstrate to students the application of land use impact assessment as a tool for sustainable land management

**3. SUGGESTED READING LIST**

1. European Commission (Ed.). 2009. Sustainable Development Indicators: Overview of relevant research

2. Helming, K., Perez-Soba, M., Tabbush, P. (Eds.). 2008. Sustainability Impact Assessment of Land Use Changes; Springer-Verleg, Berlin, Heidelberg.

3. NEMA (National Environment Management Authority). 1997. Guidelines for environmental impact assessment in Uganda. Kampala, Uganda. 60p.

4. Wathern, P. (Ed.). 1988. Environmental Impact Assessment: Theory and Practices, Routledge, London.

5. Zander, P. 2003. Agricultural land use and conservation options: a modelling approach. WageningenUniversity

**4. COURSE CONTENT, METHODS OF INSTRUCTION, TOOLS AND EQUIPMENT REQUIRED**

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| **TOPIC/WEEK (S)** | **CONTENT** | **METHOD OF INSTRUCTION / Time allocated** | **TOOLS / EQUIPMENT NEEDED** |
| 1.**INTRODUCTION**  | * Basis principles of land use impact assessment
* Definition and objectives of land use impact assessment
* Land use impact assessment as a management tool
 | Lecture (2 hrs | Chalk / Black board or Markers / Flip charts |
| 2 and 3. **CHARACTERISTICS** **OF LAND USE IMPACT****ASSESSMENT** | * The process of land use impact assessment
* Spatial and time aspects of land use impact assessment
* The social dimension of land use impact assessment
* Land use impact assessment reports and documents
 | Lecture (2 hrs) | Chalk / Black board or Markers / Flip charts |
| 3 and 4. **THE LAND USE IMPACT ASSESSMENT** **PROCESS** | * Screening
* Scooping
* Preparatory studies
* Review
* Monitoring
* Auditing
 | Lectures (2 hrs) | Chalk / Black board or Markers / Flip charts |
| 5 and 6. **QUALITY OF A LAND USE IMPACT** **ASSESSMENT** | * Public participation
* Better communication
* Identification of topics
* Assessment of alternatives
* Sustainable land use projects
* Quality of land use impact assessment reports
 | Lectures (2 hrs) | Chalk / Black board or Markers / Flip charts |
| 7 and 8. **LAND USE IMPACT ASSESSMENT** **METHODS** | * Checklists
* Network analysis
* Cost-benefit analysis
* Study references and expert-consultations
* Matrices
* Multi attribute utility theory
* Visual presentation
* Qualitative methods
* Simulation methods
* Risk and uncertainty analysis
* Analog comparison
 | Lectures (2 hrs) | Chalk / Black board or Markers / Flip charts |
| 9 and 10. **COMMUNITY AND PUBLIC PARTICIPATION IN LAND USE IMPACT ASSESSMENT** | * Meaning of community and public participation
* Levels of community and public participation in land use impact assessment
* Significance of community and public participation
* Implementing a successful community and public participation process in land use impact assessment
* Limitations of community and public participation in land use impact assessment
 | Lectures (3 hrs)Seminars (2 hrs) | Chalk / Black board or Markers / Flip charts |
| 11-15. **FIELD AND DOCUMENTED CASE STUDIES. PRACTICALS ON LAND USE IMPACT ASSESSMENT IN BOTH RURAL AND URBAN SETTINGS** | * Relevant case studies
* Field aspects of land use impact assessment in both rural and urban areas
 |  Lectures (2 hr)Field-based practicals (22 hrs) | Chalk / Black board or Markers / Flip charts/NEMA reports/Field sites |
|  | * Evaluation
 | Tests (2 hrs) |  |

**5. SUMMARY OF TIME NEEDED**

Lectures covering theory 15 hrs

Field-based practicals 22 hrs

Seminars 2 hrs

Evaluation 2 hrs

**6. OVERALL COURSE EVALUATION**

Continuous Assessment Test 20%

Field-based practicals 20%

Final examination 60%