EEE 411 RURAL EXTENSION FOR ENGINEERS

2. INSTRUCTOR(s): Dr. Frank Biryabaho Matsiko (BSc Agric.; M.A. Agric. Ed; PhD Agric. Extn)
3. COURSE TYPE: Core for B.Sc. Agric. Engineering III

4. COURSE STRUCTURE
2 Credit units: 15 lecture hours (1 contact hour per week for 15 study weeks) and 30 tutorial hours (1 contact hour per week for 15 study weeks)

5. COURSE DESCRIPTION:

Students undertaking this course will be introduced to concepts and applications of extension in rural development. Areas to be covered include:

- The Rural Community
- Approaches to agricultural extension delivery
- Tools for facilitating group development
- Helping farmers learn from experience
- Program development models
- Extension targeting
- Community mobilization

6. COURSE OBJECTIVES:

General objective

- To equip students with theoretical and technical aspects of genetic analysis for use in classical and molecular breeding and selection systems.

Specific objectives

- To provide students with principles and methods used in the study of genetics
- To enable students understand the current genetic topics and their influence on modern life
- To provide a foundation for more advanced studies in agricultural research

7. RECOMMENDED REFERENCES FOR READING

1. Kretzmann J.P and Mcknight J.L, 1993. BUILDING COMMUNITIES FROM INSIDE OUT: A PATH TOWARD FINDING AND MOBILIZING A COMMUNITY'S ASSETS. ACTA Publications, 5559 W. Howard Street, Skoike, IL 6007, USA

8. COURSE CONTENT, METHODS OF INSTRUCTION AND TOOLS AND REQUIRED

Week	TOPIC	CONTENT	METHOD OF INSTRUCTION / Time allocated	TOOLS/ NEEDED
1	Introduction and Course Overview	• Introductions • Course overview Assignment 1: Contemporary issues in agricultural extension Tutorial : Group presentations and plenary discussion of	Question and answer plenary session (1 hr) Tutorial (2 hrs)	LCD Projector, BB/Chalk,

		Assignment 1		
	The Rural Community	Reading Assignment: The Rural Community • Concept of community • Types of modern rural community • Place of institutions in rural communities • Functions of the rural community • Limits of the rural community Tutorial: Group presentations and plenary discussion of Assignment 2	Interactive lecture (1 hr) Tutorial (2 hrs)	
	2. Approaches to agricultural extension delivery	• Review of Mendelian genetics • Mendel's experiments • Assignment 2: Reproductive biology of plants and animals	Lecture (1 hr) Tutorial (2 hrs)	LCD Projector, BB/Chalk
	3. Tools for facilitating group development	• Mendelian genetics in agriculture • Mendelian laws • Practical 1a: excursion for genetic resources and variation	Lecture (1 hr) Practical -field tour (3 hrs)	BB/Chalk, Transport (80 seater) to MUARIK
	4. Helping farmers learn from experience	• Characteristics of an adult learner • The experiential learning cycle • Facilitating the experiential learning process • Transfer of learning to the place of work	Lecture (1 hr) Practical -field tour (3 hrs)	BB/Chalk, Transport (80 seater) to MUARIK
	5. Program development models	• Commonly used extension program development models • Benefits of using a program development model • Limitations of commonly used models	Lecture (1 hr)	LCD Projector, BB/Chalk
		• Tutorial 1: Developing an extension program using a logic model	Tutorial/exercises (2 hr)	LCD Projector, Flip chart, Logic model template
	6. Extension targeting	•	Lecture (1 hr) Practical - laboratory	BB/Chalk, Microscopes and

			(3 hrs)	accessories
	Community mobilization	• Mapping capacities and assets • Building relationships among local assets • Mobilizing the community's assets	Lecture (1 hrs) Practical - laboratory (2 hrs)	BB/Chalk, Microscopes and accessories
	16-17	• Revision Time • Final Examination		

9. SUMMARY OF TIME NEEDED

Lectures	15 hrs
Tutorials (and assignments)	15 hrs
Practicals	15 hrs

10. COURSE ASSESSMENT:

Continuous assessment (Quizzes):	There will be 3 Quizzes arising from tutorials and assignments during week 5, 10 and 15 of the semester	20%
Continuous assessment (Practicals):	Students will write 3 practical reports	10%
University Examination:	Final examination during week 16-17 of the semester	60%