

CUTTINGTON UNIVERSITY, SUAKOKO, BOMG COUNTY,
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WEST AFRICA

ADAPTATION UNDER THE NEW NORMAL OF AGRICULTUREAL AND ADVISORY SERVICES

COURSE SYALLIBUS AND OUTLINE

Lecturer: Molly Massaquoi

Course Title: Climate Change for EAS Providers

Course Code: AEE- 301

CLASS Schedule: M W F- 3:00-3:50 RDI 1

OFFICE Hour: T& TH -10-11AM

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A. COURSE DESCRIPTION

Adaptation to climate change is the most serious challenge facing our species. The scale is global, trajectory of onset uncertain and impacts potentially catastrophic (1 PCC 2013).

In order to adapt to the New Normal, EAS providers, intensity, persistent problems, past failures and new challenges, have the potential to converge, all involved in agriculture adaptation will need to elevate the level and quality of efforts.

Extension and advisory services (EAS) providers have a key role to play as a critical link between farming populations and sources of new information and tools, so that practices can be appropriately adapted.

This course in intended to identify past and present points of EAS engagement, and propose future response, with focus and constraints and conditions of smallholder farmers in the tropics, and the natural resources base upon which agriculture depends.

B. COURSE ORGANIZATION

This course is organized into six unit topics, but will not be limited to the following:

- Definition of key climate change terms.
- Climate change trends.
- Implications for smallholders and poor rural poor.
- Challenges of climate change for EAS providers
- EAS providers - brings it all together
- The Road Ahead

Instructional methods and strategies will include but not limited to:

- Use of guest speaker
- Brainstorming
- Debate
- Presentation
- Lecture And Discussion
- Handout
- Field visits
- Projects, etc.
- Term papers, etc.

COURSE OBJECTIVES

When provided students with essential and relevant knowledge of concepts of climate change adaptation approaches, they will be able to:

1. Describe the nature of climate change, the associated challenges and potential impacts to smallholders farmers;
2. Assess the vulnerability and resilience, using system approach;
3. Identify the effects of two dimensions of climate change
 - Climate change trends
 - Weather disruption
4. Manage local options to avoid panic and destructive short term behaviors
5. Increase their knowledge and skills to prepare for livelihood under the new normal, etc.

COURSE OULTINE

TOPIC(S)	INSTRUCTIONAL OBJECTIVE	INSTRUCTIONAL METHOD/STRATEGIES	EVALUATION
Definition of Key terms <ul style="list-style-type: none"> • Vulnerability • Resilience • Adaptation • Mitigation 	<ul style="list-style-type: none"> • Discuss these terms in relation to climate change • Write a paragraph using each of these term 	<ul style="list-style-type: none"> • Class work for presentations • Reading assignment 	Distinguish between each of these terms <ul style="list-style-type: none"> • Vulnerability And Resilience
Climate change Trends – show onset specific changes	<ul style="list-style-type: none"> • Brainstorm on the concepts of GHGs; global warming Rain air temperature weather distribution 	<ul style="list-style-type: none"> • Collaborative group work • Presentation • Lecture and discussion 	Brainstorm on the following concepts: Greenhouse gas(GAS), Global warming, Rain air temperature, weather distribution, tertiary impacts on agriculture
Implication for smallholder and Rural provided	Assess the vulnerability and resilience using a system approach	Symposium	What would be your role as EAS providers in managing the risk of climate change?
Challenges of Climate change for EAS providers	Manage local option to avoid panic and destructives term behaviors	Discussion and Lecture	State and discuss the two key challenges for EAS providers
EAS providers – bringing it all together	Evaluate the strategies of EAS / interventions	Directed reading	Case studies
The Road Ahead	Increase their knowledge and skill to prepare for life under the new normal	Project paper	Write short notes recommending interventions as head of training institution.
Figure 1-4	View and explain figure	Use of charts and graphs	Give practical events of climate change in your area.

FIGURE 1-4 (VIEWING)

1. Co2 and global temperature.
2. Projected impact of a 3°C temperature...Increase on crop yields.
3. Number of extreme weather events global 1900 – 2015.
4. Three major types of interventions identified by the tortillas on the roaster.
5. Climate change impacts on bean producing areas in Central America.

Tests

References

- Barrios, S., Bertinelli, L., & Strobl, E. (2003). *Dry times in Africa*. CREDIT research paper No. 03/07. Centre for Research in Economic Development and International Trade. Nottingham: University of Nottingham.
- Barrett, C. B., & McPeak, J. G. (2006). Poverty Traps and Safety Nets. In A. de Janvy & R. Kanbur (Eds.), *Poverty, inequality and development essays in honor of Erik Thorbecke*. New York, NY: Springer.
- Bodin, O., Crona, B., & Ernstson, H. (2006). Social networks in natural resource management: What is there to learn from a structural perspective? *Ecology and Society*, 11(2), r2.
- Bryan, E., Deressa, T. T., Gbetibouo, G. A., & Ringler, C. (2009). Adaptation to climate change in Ethiopia and South Africa: Options and constraints. *Environmental Science and Policy*, 12(4), 413–426.
- Chinsinga, B., Mangani, R., & Mvula, P. (2011). The political economy of adaptation through crop diversification in Malawi. *IDS Bulletin*, 42(3), 110–117.