



BUILDING STRONGER UNIVERSITIES
IN DEVELOPING COUNTRIES



PhD Course

CLIMATE CHANGE ADAPTATION AND MITIGATION

COURSE DESCRIPTION:

The course aims at giving the PhD student a thorough background in climate change adaptation and mitigation. It highlights on the conceptual framework of the two concepts and their local and global implication as a sustainability issue. It traces adaptation and mitigation options application from a top-down approach and their implication for the livelihood of the smallholder farmers. The course will include a combination of lectures and group work on chosen topics within adaptation and mitigation in smallholder farming systems. The practical and theoretical exercises and journal club discussions will be conducted in groups. Each practical and theoretical exercise will result in a short exercise report from each student. These reports will make up the student's personal course portfolio, which will be evaluated after the course.

COURSE OBJECTIVE:

To provide participants with deeper understanding of climate change adaptation and mitigation options, needs and best practice that could be implemented to build the resilience of the Ghanaian smallholder farmer. The focus of the adaptation and mitigation option used by the smallholder farmers and their environmental, income and food security outcomes. It examines some of the major international agreements and policy initiatives and how Ghana has participated in international adaptation and mitigations regimes. Since adaptation outcomes are local, the course will examine adaptation and mitigation synergies of national policy implementation.

COURSE DETAILS

The course will be open to both PhD and Master students within relevant programs at the University of Ghana in order to contribute to the development of a solid foundation for further thesis research on climate change adaptation and mitigation.

Volume: 80 hours including preparation, reading and reporting. Direct course work: 40 hours over 5 days, Reading before: 20 hours, Report work: 20 hours

Target group: PhD and Master Students within *Agronomy, Biology, Environmental Science, Geography, Physics and other relevant areas.*

Number of Participants: Maximum 30.

DATE: 28th October – 1st November, 2019

TIME: 8.30am – 4.00pm

VENUE: Ghana-Korea Information Access Centre, Balme Library

Registration:

Click on the link to register: <https://docs.google.com/forms/d/e/1FAIpQLScGbv0ZNNubu7dyWdf9Q-3rsb5A1fggc6u1W4bIKd5BmXcy4w/viewform?vc=0&c=0&w=1>

DEADLINE FOR REGISTRATION: TUESDAY 8TH OCTOBER, 2019

LEARNING OUTCOMES AND COMPETENCES:

After a successful completion of the course, student will be able to:

- Explain conceptual underpinnings of climate change adaptation and mitigation.
- Present the international climate change legal and policy framework and explain key issues under negotiation.
- Explain the Ghana's adaptation and mitigation strategies geared towards sustainable development.
- Explain how national action on adaptation and mitigation translates into local level activities
- Provide a rationale for climate change mitigation and propose actions in key sectors
- Analyse adaptation and mitigation outcomes in smallholder cropping systems.
- Evaluate adaptation and mitigation option with synergies for sustainable development.

COURSE CONTENT

Before the course: pre-course assignment: Students will put their own PhD/MSc projects in perspective to the course themes

Day 1: CC Drivers, emissions, land changes, impacts (journal club) - possibly exercise (effects)

Day 2: Adaptation: presentations including national strategies, Adaptation and Mitigation Funding, Adaptation Synergies in Ghana's NDCs, Planning for Climate Change

Day 3: Emissions: simple exercises e.g. calculation of static chamber data

Day 4: Mitigation

Day 5: Resilience: adaptation and mitigation synergies in the context of sustainability, the SDGs, course evaluation

Practical information: We recommend that students bring laptops, if possible. Students will also be required to produce a short report during the course, which will also require a computer.

FACILITATORS AND THEIR AFFILIATION:

University of Ghana: Kwadwo Owusu | Christina Amoatey

Aarhus University: Jørgen E. Olesen | Mathias N. Andersen | Chiara De Notaris

The BSU Phase 3 project is a collaboration between University of Ghana, Aarhus University, and University of Copenhagen with funding from the Danish International Development Agency (DANIDA). The project aims to i) enhance administrative capacity for research management; ii) enhance research and outreach capacity at system/organisational level, and iii) research, outreach and teaching capacity at the PhD and post-doctoral levels.