

SLUkurs

Syllabus

PVSo109 Restoration of degraded semi-arid landscapes – Livelihood, Livestock and Land use, 10.0 credits

Syllabus approved

2014-01-10

Subjects

Agricultural Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

Accepted as a PhD student

Objective, including learning outcomes

The course will provide understanding of multifunctionality and complexity of rangelands. The students should be able to relate gained knowledge to their own

research topic, but also to other disciplines in a multidisciplinary context. The students should also get an insight and understanding in participatory methods and experience in use of some of the methods. In addition, through small project work, do multidisciplinary analysis and reflection.

After completing the course the student shall be able to:

- describe pastoralism and multifunctionality of rangelands
- describe grazing strategies and explain consequences of overstocking of animals
- discuss animal husbandry and animal production in relation to sustainable intensification
- describe, discuss and analyze co-benefits and trade-offs between desired landscape functions of different restoration methods/techniques
- describe the drivers of vegetation changes
- explain carbon sequestration in rangelands under different management regimens
- use participatory research methods in practice

Content

This is a multidisciplinary course and it is relevant for students in different disciplines such as animal science, soil science, agroforestry, ecology, agricultural economy, rural development, etc.

The course will start with a video meeting/seminar to be followed by literature studies by the students at their home university. Field work will be the core in the course and the students will work in smaller groups or pairs during most part of the course. A high degree of interaction will be achieved by regular discussion and reflection sessions and the students will also make presentations, of individual and group assignments. The field work will be done in a "real case" where restoration of degraded rangelands has been established at different times since mid-eighties and is still going on. This gives the student a unique possibility to learn processes and changes of rangelands restorations but also to relate to their own research topic in a bigger picture. The pair of students will work with both a farmer who has implemented restoration and a farmer who has not. This in turn could be a sort of extension where the farmer not implemented can see effects of restoration methods. The up-start of the field work will be carried out at JKUAT (Nairobi) with 2 days of lectures and the students will have a possibility to meet and discuss with researchers from ICRAF and ILRI. During these two days, the students will also do individual presentations of the literature read and how they relate it to their own research area. During the field work the students will visit and interview farmers and also collect some basic data as well as "transect walks". The outcomes of the field part will later be presented orally in an end seminar but also in a course

report done in a scientific report as well as in a popular science way, e.g. magazine like.

Requirements for examination

The examination will be composed of several parts: Introductory presentation of own research in relation to literature. Participate in all activities and exercises. Presentations of assignments and field work both orally and in written form. Approval of scientific report completed within three weeks after the field work in December and a short report written in a popular scientific way.

Additional information

All costs for the course (teaching travel costs and accommodation) will be covered by the course for students from SLU, JKUAT and other universities in the East African. Student from other Nordic universities can take the course if place is available on their own expenses.

The course will be linked to a new research platform involving SLU, ICRAF, ILRI and other universities in Sweden and Kenya; the Triple L initiative (www.agri4d.se.)

The course will be running from September to January 2015.

Responsible department: Animal Nutrition and Management, SLU, Dept. of Forest Ecology and Management, SLU, Dept of Botany at Jomo Kenyatta University of Agriculture and Technology, Kenya

Location: Nairobi and West Pokot, Kenya

Responsible department

Department of Animal Nutrition and Management