Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

# SLUkurs

## Syllabus

## PFS0114 Ecology across boundaries, 9.0 credits

## Syllabus approved

2014-10-08

## Subjects

Biology

## 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

The course is open to PhD-students in biology and related subjects. The number of students is limited to 12. Each prospective student shall present a briefCV and a motivation of no more than 200 words outlining how this course will benefit their PhD studies. This information will be used to select students on the course. Students may be called for a brief interview as part of the selection procedure. The applying student should also mention if she/he has participated in similar field courses in the past.

**Objective, including learning outcomes**

The main objective is to train the students' critical and out-of-the-box thinking. We will do this by visiting a range of ecosystems in South Africa and exploring similarities and differences among these South African ecosystems but also between South African and Nordic ecosystems. We will also do this by creating cross-cultural events where the students will interact with South African students and senior researchers from diverse cultures. Students will be trained in several fields in ecology, specifically; trophic ecology, restoration & conservation ecology, global change ecology & Earth Observation Science

**Content**

The course will have three mandatory parts; Part I will be at VFM in Umea, Part II in South Africa, and Part III back at VFM in Umea.
Part I will exist of two weeks during the second half of January 2015. The first week will start with an introductory day with preparatory lectures and four days during which students will work
on group projects. The students will be grouped in teams and asked to
explore one of three given topics for which there are different paradigms in the northem and southem hemisphere. They may also choose their own topic. As output the groups have to prepare
a 2-hour workshop that they will have to lead during the field trip in South Africa.
Part II. Students will experience four of the eight biomes in South Africa; grassland, coastal, savanna and scarp forest biomes. We will do this by visiting three protected areas; 6 days in Hluhluwe-iMfolozi Park (savanna and scarp forest), 3 days in isi-Mangaliso World Heritage Site (coastal), and 4 days in Drakensberg National Park (grassland and mountain). In all of these areas, the students will get lectures from the course organizers and from local researchers and conservation managers, next to visiting local field experiments and observational studies. In addition we will visit one of the largest ecological restoration projects in the southern hemisphere, dune restoration by the mining company Richards Bay Minerals (1 day). Visiting this wide range
of areas allows us to look at ecological issues along a gradient of land use from protected areas to commercial and communal land use. Besides these natural areas, we will visit two South African academic institutions; the School of Biological Sciences at the University ofKwazulu-Natal (UKZN, 2 day visit), and the South African Environmental Observation Network (SAEON, 1 day visit). At UKZN, we will have a joint symposium with local postgraduate students. In the Drakensberg, we will visit a research node of SAEON together with local undergraduate and

postgraduate students and leam about Earth observation Science through a combination of lectures and field exercises. At three moments during the field trip we will have the 2-hour workshops that students prepared in Umeå.
Part III. Back in Umeå, the students will be asked to reflect back on the field trip and prepare a 20-30 minute presentation in which they outline what they have learned from this course, on a generic skills level but also in terms of southem versus northern hemisphere ecology using the
outcomes from the 3 workshops. Students have 2 days to prepare the presentation and we will have one day during which all twelve students will present.
Part I will be during the last 2 weeks of January and first week of February 2015. The field trip, part II, is planned for 10 – 28 February 2015. This means leaving Sweden on the 9th of February and back on the 1st of March. After returning the students will have to give a final presentation, course part III, in April 2015 The total amount of course days will hence sum up to 30 days (9 credits).

**Requirements for examination**

Written and oral presentations. To pass the course students also have to actively participate in all components of the course, which
includes actively taking part in the many discussion sessions.

**Additional information**

Students are expected to secure funds for the air travel and some accommodation costs (with an estimated total of 17000 SEK).

**Responsible department**

Department of Wildlife, Fish, and Environmental Studies