BIOL 375 - Conservation Biology & Research Methods in Savannas (Summer of 2013) 4 credits

Overview:
In the summer of 2013, the Department of Biological Sciences would like to offer a 4 credit off campus course - Conservation Biology & Research Methods in Savannas. Enrollment would be open to any student, with an internal application process to select students if there are more than 12. The course would run through the first 3 weeks of June. (A subset of students would be selected to stay for an extended 3 weeks of research – this would be funded and handled independently of the summer course proposal).

Location:
Laikipa, Kenya hosted at Mpala Research Centre (MRC) - http://www.mpala.org/

MRC is an international research station run by the Smithsonian, Kenya Museums, Princeton University, Kenya Wildlife Service, University of Michigan, and a few other entities. It has housing, security, and food for visiting researchers and students. Our group would be housed at the River Camp – a set of semi-permanent tents set up along the Ewaso River.

I have an ongoing research project in Laikipia based at MRC, where I have a Landrover, fire trailers, and equipment. I also have ongoing collaborations with Ph.D. students and researchers from other universities, which continue to mature and develop each year. My wife, Donna Shenk Sensenig, would be hired to help teach the course (an avid ornithologist) and provide help with logistics and student mentoring.

Rationale & Significance to the Curriculum:
Laikipia has the highest diversity of wildlife in Kenya, despite being on private land. The area remains an excellent locale for exploring the challenges of human-wildlife coexistence and models create approaches to conservation within the context of poverty and rural development. The course will seek to link the ecological system with the social system. Additionally, the biology department is committed to engaging students in long-term research projects. With curricular changes that require a senior thesis project we are seek ways to get students involved in our existing long-term research projects. This course would seek to prepare students broadly for research in terrestrial habitats, but also provide training and preparation for a subset of students who may get involved in my long-term research in Kenya.

This course would provide students the opportunity:

- to study a tropical ecosystem in the context of a “working landscape”
- examine opportunities and tensions between conservation and rural development
- get a feel for a variety of research projects at other universities (via guest lectures)
- taste the kinds of projects graduate students are leading at MRC
- design and implement their own mini-research project
Enrollment:
We would hope to have 12 Goshen College students participate in the course. If external granting sources provide support, I would also be recruiting 4-6 Kenyan undergraduates to take the course with our students. Grant funding may be able to provide payment for Goshen College credits to transfer to their university. I have a contact at the University of Nairobi, with whom I would partner to see if this is possible.

Cost:
Traveling to Kenya is expensive. Living and working in a remote area is also costly. A subset of the students would benefit from extended opportunities to stay and do research – which may help justify the high cost. The Biology Department may have interest in offering some scholarships to those with need, but we would want to explore this idea with administration. See attached budget.

Some cost savings would be realized in that the main professor (Ryan Sensenig) will already be in East Africa to visit Tanzania in preparation for SST in the spring of 2014.

Safety and security issues:
MRC is located in a very sparsely populated area of Kenya and is not considered a high profile tourist destination. The research center has its own security personnel on 24-hour duty. All participants would register and pay for medical evacuation insurance via helicopter, should health issues arise. When in Nairobi (for flying in and out) we will stay at the Mennonite Guest House – a place that is safe and well traversed by the Mennonite church community.