RANGELAND ECOLOGY  
(Field Studies in South Africa and Botswana)  
NRM 5302:02  
Summer I 2018

**Instructor:**
Dr. Robert Kinucan  
Room 101, Turner RAS Center  
Phone: 432-837-8201  
Office hours: During the field studies course, by arrangement (prior to and following the study abroad field trip during SSI)

**Expected Learning Outcomes:**
This is a field studies course that will be conducted in South Africa and Botswana. The class provides an in-depth look at ecological, environmental, social and economic attributes of rangeland ecology in the context of semiarid rangelands of the southern African continent. By the completion of this course you should be able to demonstrate an aptitude in the following areas: 1) a knowledge of physical and biological characteristics of south African rangelands, 2) a practical knowledge of physiological, anatomical, and ecological functions and requirements of rangeland plants and foraging animals, 3) a knowledge of ecosystem elements, 4) a knowledge of the fundamental concepts of rangeland resource management, including vegetation inventories and monitoring, vegetation manipulation, and livestock grazing management strategies, and 5) develop a global perspective for ecosystem conservation and management, and an improved understanding of culture and its impact on management approaches. Students completing the course will recognize rangeland ecosystems and their proper use and management as demonstrated through the successful completion of course assignments, papers and critical reflection. The Department of Natural Resource Management Program Student Learning Outcome (SLO) 2 (demonstrate knowledge of the elements of an ecosystem) and SLO 3 (Communicate about natural resources and conservation both verbally and in writing) are addressed in this course.

**TEA AFNR Educator Standards** – Standard VIII. The AFNR teacher understands and applies knowledge of environmental systems, natural resource management, and the effects of agriculture, energy, and food processing on the environment.

**Accessibility:**
Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make necessary arrangements. Students must present appropriate verification from Accessibility Services during the instructor’s office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Accessibility Services has been provided. For additional information, please contact Mary Schwartz with Accessibility Services in Ferguson Hall 112, or call 432 837-8203

**Lecture:**
Pre-trip meetings TBS; participation in field trip activities.

**Textbook:**
None. Readings may be assigned.

**Grades:**
Field trip participation 25% (50 points)
Assignments 75% (150 points)

Total 200 points

Grade assignment: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; < 60 = F.

Class Organization:
1) This is a field based class to South Africa and Botswana. I expect you to conduct yourself in a professional and courteous manner. You are ambassadors for the College of Agricultural and Natural Resource Sciences, Sul Ross State University, Texas and the United States. I expect you to be on time and ready for each day’s activities. I also expect you to maintain situational awareness at all times, that is, be aware of your surroundings, look after your safety and the safety of others in our group. Be responsible for your actions.
2) We will operate on a “buddy system.” Throughout the trip it will be your responsibility to ensure your partner is present and prepared.
3) Participation is a large part of the class grade and you will be evaluated on your level of interaction, attitude and professionalism.
5) During an international trip of this nature, we are bound to encounter unanticipated delays and changes to our itinerary due to forces beyond our control. We will strive to make this a positive and smooth learning experience. However, flexibility and a positive attitude will contribute significantly to an excellent trip outcome. I consider the ability to think critically and adjust to circumstances an important life skill that trips like this help develop.

Topical Outline:
See trip itinerary.

Assignments:

Pre-Post Trip Paper (20 points): Cape Town is undergoing a sever water shortage. When we arrive in late May, they will likely be under severe water rationing. You will develop a term paper dealing with water shortages as they pertain to urban environments, and how rangelands play a significant role in metropolitan areas in arid and semiarid regions.

Photo Scavenger Hunt (40 points): You will be given prompts on items, examples, and situations to find and photograph during the trip. For credit, you will include the pictures for each prompt in a PowerPoint, with one prompt per slide. Each slide will contain the prompt, photo, and a caption explaining how the photograph illustrated the prompt.

Journal (40 points): You will keep a daily journal of your thoughts, activities and observations. These will be checked daily to ensure you are maintaining the journal. You will include your personal observations, and will be provided prompts/questions that will require a response.

All assignments (e.g. the journal and PowerPoint) will be due no later than June 29.