

Biology 485/485G (also for ANSC 475 by special arrangement)
Professor: Michael Stokes, Michael.Stokes@wku.edu, 5-6009
Conservation and management of African wildlife, a study abroad course

I've taught this course since 2003. Biology 485 is a catch-all course number for Biology field courses. This version is a course designed to teach you to capture, immobilize, handle and translocate African wildlife. The course is designed primarily for wildlife biology or pre-veterinary students. It counts as an elective course towards the Biology major, and is generally allowable for ANSC students. You'll spend about two weeks in the field learning the techniques most people have only seen on television.

Topics covered in this course:

AT WKU:

Through online instruction, students will explore these topics as part of a non-credit bearing 'course' offered via a Blackboard organization site. Eleven lectures (approx. 7 hours) cover these topics:

1. Introduction to Wildlife
2. The Wildlife of South Africa (test required)
3. Principles of Wildlife Management
4. Introduction to Conservation
5. Principles of Conservation
6. Comparative Models of Wildlife Management and Conservation
7. Methods of wildlife capture
8. Basic immobilization principles
9. Geography, Evolution and Ecology of South Africa
10. South African Human History and Languages
11. Traveling in Developing Countries—safety rules

IN SOUTH AFRICA (est. May 20-June 02) Biology 485/485G.

The sequence of topics will vary with year and activities.

1. Field safety lectures (at base camp and in transit)
2. Reptile conservation (at Khamai Reptile Center)
3. Wildlife rehabilitation and local attitudes towards wildlife (at Moholoholo Rehab Center)
4. Game ranching and ranch management (at several sites in Limpopo and Mpumalanga Provinces)
5. Introduction to wildlife capture (at base camp)
6. Introduction to chemical immobilization (at base camp)
7. Introduction to mass capture and wildlife transport (at base camp)
8. Practical exercises in animal handling, capture and transport (at various sites)

Note that dates for particular topics are by necessity flexible, and so are not listed.

Student assessment

Students are evaluated on a standard grading scale (A-F) based upon:

- ☐ Their level of participation in the activities of the course (40%). Attendance is absolutely mandatory.
- ☐ Quality and timeliness of a required daily journal and field notebook (30%), due on the last day of the class.

- Pre-departure tests (3) covering safety rules and traveling in Africa, wildlife biology, and basic game capture theory (30%). These must be completed by May 01.
- Standard grade divisions of 90%/80%/70%/60% apply for letter grades.
- Graduate students will be required to coordinate specific activities with undergraduate students. These activities vary, but typically include updating the cumulative pictorial journal of avian sightings for the course and coordinating and leading camp maintenance activities. These leadership activities are considered part of their participation grade.

A capture manual prepared by Parawild Edu-Capture LLC will serve as the text for students in South Africa and is included in the course pricing.

Prerequisite: permission of instructor based upon academic record, professional references, and relevance of the course to a student's chosen career. Students signing up for 485G must have graduated with a Bachelor's degree.

Physical requirements for the course:

Students must be in reasonable physical condition with no severe allergies or physical or mental conditions that may require immediate access to medical intervention, and should not be reliant on any medications that they cannot do without for the duration of the course should they lose such medications. Students must be able to walk distances of up to 2 km over rough, rocky terrain, and be able to run short distances (200m). They must be able to lift reasonable loads for their size and gender. They must be able to climb trees, if not, they must remain with the vehicle for certain activities.

Course learning goals:

This is a skills-based course for students in relevant careers, including veterinary medicine, ecology and wildlife biology. The goals are to learn and apply:

- basic field safety when working with wildlife
- principles and practices of wildlife capture
- principles and practices of wildlife immobilization
- principles and practices of wildlife handling
- principles and practices of temporary housing of wildlife
- principles and practices of wildlife translocation
- theory and practice of wildlife conservation in South Africa and the US

Rationale for teaching the course in South Africa

In South Africa, wildlife management is privatized. Wildlife are frequently bought and sold, requiring intensive hands-on management. There is no place in the U.S. or in most African countries where students can experience and learn techniques of wildlife capture at the rate and intensity of the experience in South Africa. Additionally, South Africa has good transportation, communication and medical infrastructure, and most educated people speak English. This is the single best hands-on course a student can take to prepare them for veterinary professional schools or zoo work with wild, exotic animals. Students will participate in veterinary and wildlife management practice South African style.

Academic Honesty:

Don't cheat. Lions will monitor your behavior and punish the wicked. Honestly, this course is about learning how to do things, hands-on. Poor social behavior or failure to pull your weight on activities will result in no participation points.

Disability Statement:

See 'physical requirements' listed earlier. It is not possible to accommodate physical or mental conditions that would endanger you or anyone else or prevent full participation in the course activities. We work in the African bush. It's a rough place. Contact me if you have questions or concerns.

Additional Costs:

In addition to the costs you will pay through WKU, students should bring \$150 USD for ground transport in country. Biol485 also incurs a \$100 lab fee, which will be used to pay for your first and last night's hotel/meals in Johannesburg. If you want to purchase souvenirs or food or drink in addition to that provided on the course, discuss this with me. Debit cards generally work fine in South Africa and are preferable to carrying large amounts of cash. If you wish to stay after the course for fun or for internships, discuss the costs with me.