

SYLLABUS

1. COURSE AND CONTACT DETAILS

Courses: African Ecology and Conservation

Credits: FW465 (501) 4 credits; graded letter grade
FW565 (501) 4 credits; graded letter grade

Dates: Summer I semester
May 16 - June 04, 2010

Location: Namibia

Instructor: Dr Werner Dörgeloh
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1.1 Participating Institutions and Organizations

North Carolina State University, USA

Gobabeb Training & Research Centre (Desert Research Foundation of Namibia)

Elephant- Human Relations Aid

Ministry of Environment and Tourism, Namibia

Cheetah Conservation Fund, Namibia

2. PREREQUISITES

An introductory course in wildlife management, conservation, ecology, zoology, natural resources, biology, environmental science, botany, tourism or equivalent.

2.1 Registration

Once a student has been accepted onto the study abroad program, s/he selects only one of the courses, either FW465 or FW565 on the post-acceptance questionnaire (see Post-decision Materials on the study abroad website <http://studyabroad.ncsu.edu>). The student will then be registered by the Study Abroad Office. *Note:* Students cannot register the course themselves.

3. GENERAL EDUCATION PROGRAM (GEP) COURSE DOCUMENTATION

3.1 GEP Categories

Natural Sciences

Global Knowledge

3.2 GEP Category Objectives

Through the teaching of courses offered in each of the following subject areas as well as in the delivery of the academic disciplines, the General Education program will:

- Provide instruction that enables students to master basic concepts of a broad array of the intellectual disciplines,
- Help students develop versatility of mind, an ability to examine problems individually and collaboratively from multiple perspectives, including ethical and aesthetic perspectives,
- Provide students the guidance and skills necessary to become intellectually disciplined, to be able to construct arguments that are clear, precise, accurate, and of relevant depth and breadth,
- Encourage students to take personal responsibility for their education, including the ability to find, evaluate and communicate new information, setting the stage for life-long learning.

Objectives for courses in the category of Natural Sciences:

Each course in the natural sciences will provide instruction and guidance that help the student to:

- use the methods and processes of science in testing hypotheses, solving problems and making decisions; and

- make inferences from and articulate, scientific concepts, principles, laws, and theories, and apply this knowledge to problem solving.

Objectives for courses in the category of Global Knowledge:

Each course in Global Knowledge will provide instruction and guidance that help students to achieve at least 2 of the following:

- Compare systematically the ideas, values, images, cultural artifacts, economic structures, technological developments, or attitudes of people from different societies;
- Identify the historical context of ideas and cultural practices and their dynamic relations to other historical contexts;
- Explain how a culture changes in response to internal and external pressures.

3.3 GEP Student Learning Outcomes

After successfully completing the course, students will be able to:

Natural Sciences

- identify ecosystems and the species found there
- use scientific methods to measure ecological variables to understand the ecosystem
- identify conservation problems and come up with solutions
- make educated decisions in managing natural resources
- specific learning outcomes (refer to 4.) are taught through lectures, discussions, reading assignment, field work, student presentations and papers.

Global Knowledge

- recognize different ethnic and socio-economic groups and their role in society
- assess a foreign culture and compare its values with their own
- identify the influence of globalization on Namibian culture
- specific learning outcomes (refer to 4.) are taught through lectures, discussions, practical examples, a community visit and a travel journal.

3.4 Means of Assessing GEP Outcomes

Students will demonstrate their achievement of the outcome through the following activities and submissions:

Orientations Sessions

Five orientation sessions are being held prior to departure where students are being prepared for the overseas trip through a number of lectures and discussions on the country to be visited, foreign cultures, geography, and ecology.

Pre-trip Paper

Each student is given a topic on natural resource management. Students are required to submit a written paper and to present their paper to the rest of the group.

Participation during the Trip

Participation in lectures, discussions, field work, field excursions and other activities are being evaluated.

Field Forms

Students are required to complete two field forms which measure observation skills of animal behaviour and species identification.

Post-trip Paper

A written paper of the field notes taken and the fieldwork conducted has to be submitted.

Travel Journal

The travel journal is a questionnaire evaluating a student's cultural experience while s/he was abroad.

Post-trip Activities

Students are requested to participate in the upcoming study abroad fair and to present lectures at various venues as required.

For further detail about the daily activities and fieldwork refer to the itinerary.

4. STUDENT LEARNING OUTCOMES FOR COURSE

Specific learning outcomes enable students to:

Natural Sciences

- become skilled with basic ecological sampling techniques
- interpret the ecological principles and driving forces in various ecosystems
- recognize the importance and role of science in managing large protected areas
- identify and understand the challenges of park management in the African context
- identify common animal and plant species
- distinguish between various behaviours of large mammals
- be familiar with African wildlife ecology and management
- recognize the causes and effects of dryland habitat degradation
- understand the challenges and implications of predator conservation
- make sound management decisions for a game ranch
- recognize the impacts of international tourism on the natural resources and society
- articulate their readings to the wider student community

Global Knowledge

- recognize the historical importance that shaped the foreign society in its present form
- be familiar with foreign cultures and become culturally sensitive
- compare the infrastructure, economic development, cultures, values and attitudes of a foreign society with their own

5. REQUIRED TEXTBOOKS

None

6. COURSE ORGANIZATION AND SCOPE

This course provides an international perspective on desert ecology, the African savanna ecosystem, African wildlife ecology and management. In addition, the management of a large national park of international importance, conservation of predators and their conflict with humans, and international tourism are discussed. Various sampling techniques are practiced during field work. A combination of lectures, field lectures, field work, field excursions, data analyses and home work form an integral part of the course.

Topics are listed as per itinerary and the approximate time allocated to each major topic:

- Orientation Sessions - lectures, discussions, Q&As 10 hours
- Desert Ecology - lectures and field work 3 days
- Ecological Sampling Techniques,
Data Analyses and Interpretation - fieldwork, discussions 3 days
- Ecotourism - throughout the program
- Wildlife Ecology - lectures, fieldwork, discussions 4 days
- Park Management - field lectures, field excursions 2 days
- Animal Behaviour - field observations, discussions 3 days
- Bird Identification - throughout the program
- Conservation - lectures, field exercises, discussions 2 days
- Savanna Ecology - lecture, field exercise 1 day
- Game Ranch Management - field excursion, field lecture, discussions
4 hours
- Cultural Experience - throughout the program

7. READING ASSIGNMENTS

Students are required to familiarize themselves with the international conservation organizations World Wildlife Fund (WWF), World Conservation Union (IUCN), Convention for International Trade in Endangered Species (CITES) and the Biodiversity Convention. Information is available on the respective websites.

Students are also required to frequently read the news and report back on the latest news at the orientation sessions. Suggested websites for news are:

Namibian www.namibia.com.na

USAID Namibia www.usaid.org.na/pronews.asp?proid=3

8. HOMEWORK

8.1 Orientation Sessions

Dates and venues of the orientation sessions will be announced.

January

The purpose is to meet the group and to discuss travel arrangements, passports, vaccinations, air tickets and assignments. A lecture on Namibia will be presented. Each student will be given a topic for the pre-trip paper. 1.5 hours

February

Lectures on desert formations and the Namib Desert in particular will be presented by the program director. 2 hours

March

Lectures on cultural awareness and African ungulate classification will be presented by the program director. 2 hours

April

A general orientation session will be hosted by the Study Abroad Office. Afterwards our group will discuss the itinerary, syllabus, field work, packing list, safety issues etc. 2 hours

May

Final arrangements will be discussed prior to the tour. At this session students will also present their pre-trip paper. 2.5 hours

8.2 Assignments

8.2.1 Pre-trip

Pre-trip Paper Deadline: April 15

- Topics for the pre-trip assignment will be allocated at the first orientation session.
- The paper should be written as a review paper which includes a title, introduction, various sub-headings, a summary and a list of at least five references.
- The paper should be well organized in a logical way, giving a well researched overview of the topic and a clear description thereof.
- An hard copy of the paper (about 5 pages; 1.5 spacing) should be submitted to the program director.

Presentation

- Each student is required to present (about 10 min.) his/her topic at the last orientation session.
- Students should demonstrate excellent oral communication by speaking in a clear voice, engaging the audience, using an appropriate rate of speech, be well organized, incorporating accurate information, and paying attention to the allotted amount of time.
- Out-of-state students have to present their topic at the Gobabeb Training & Research Center, Namibia.

8.2.2. During the trip

Active participation in all activities is mandatory.

Students will be divided into groups and each group will be assigned to take notes on defined sections of the study tour. The tour will be divided into:

Group 1	Namib Desert
Group 2	Etosha National Park
Group 3	EHRA and Cheetah Conservation Fund (CCF)

Students are expected to maintain field notes of the allocated section. Notes should be taken of the general environment, common species found, field work conducted, a summary of the results, field activities and excursions, summary of field lectures and classroom lectures. For further detail refer to the post-trip paper.

Field Forms

Submit the completed field forms on the last day of the trip:

- Animal Behaviour
- Bird List

8.2.3 Post-trip

Post-trip Paper Deadline: July 15

Based on the field notes taken for your allocated section, each student is required to:

- Submit a paper of about 5 to 10 pages in electronic format to the program director.
- The paper should be written in a standard scientific format and not as a travel diary
- The paper should have a proper title and be subdivided into sections with their relevant sub-headings
- The introduction should be a brief description of the environment

- The main focus of the paper should be on the field work (description of the methods, as well as summary, interpretation and discussion of the results, the most important graphs or tables), field activities and excursions, field lectures and classroom lectures.
- Other aspects to be included (where applicable) are:
 - wildlife management and conservation issues: challenges, practices and solutions
 - ecotourism impacts and solutions
 - students are expected to note any environmental or resource degradation that has occurred and make notes on how this degradation can be prevented or mitigated. Students will be asked to consider actions that can be taken to conserve each important resource.
 - community involvement in conservation
- A short list of the most common species found in this area should be attached as an appendix.
- The paper should also include a few relevant photos taken during the trip
- The most comprehensive, articulate and scientifically accurate paper will be published in the newsletter of the Fisheries and Wildlife Sciences program

Travel Journal Deadline: July 15

Submit a short paper based on the questionnaire.

Other Post-trip Activities

- Help at the Namibia booth during the upcoming Study Abroad Fair in September. Date tba
- Presentations at the Aldo Leopold Wildlife Club, Department of Forestry seminar series or other meetings as requested.

8.2.4 Graduate Students Registered for FW565 Deadline: July 15

In addition to the listed assignments, graduate students (FW565 only) are required to submit a written paper about the ecology, management, conservation and practical solutions (where applicable) of any species, ecosystem, protected area or any other topic covered during the field trip in the host country. The paper (minimum 5 pages) should be a more comprehensive and rigorous review of the topic, written in a standard scientific format. A list of at least 5 references must be included.

Note: Please do not use the same or similar topic as for your post-trip paper.

9. GRADING

The field trip itself forms the core of this course.

	FW465	FW565
	% of final grade	% of final grade
Pre-trip assignment	15	10
Field trip participation	40	30
Post-trip assignment	20	20
Field forms	15	10
(Bird list; Animal behaviour)		
Travel Journal	10	10
Paper (FW565 students only)		20
Total % obtainable	100	100

The trip participation grade will include both objective and subjective measures of your participation during the trip. Participation is more than just presence. Your involvement with trip activities, field exercises, attentiveness during presentations in class and in the field, and contribution to group chores will be assessed.

Inappropriate behaviour (e.g. intoxication from illegal substances or excessive alcohol use) will be dealt with as determined by the program director, and it may also affect your course grades.

10. LATE ASSIGNMENTS AND INCOMPLETE GRADES

10.1 Late Assignments

Late submission of papers and other homework will result in a lowering of the student's grade. Two (2) points will be subtracted for every day an assignment is submitted after the due date. Assignments received 5 days after the due date will not be graded. No exceptions will be permitted.

10.2 Incomplete Grades

Students who have not submitted their homework assignments by the deadline will receive an incomplete grade.

11. ATTENDANCE

Students are required to attend all lectures, field lectures, field work, discussions and other program activities prior to and during the program. The responsibility of attending these activities lies with the student. Makeup of materials missed for legitimate reasons e.g. those of a medical nature, should be arranged with the program director.

Unexcused or extended absences from the scheduled program activities are cause for dismissal from the course and grounds for sending students back to the United States when we are abroad. For more information on the NCSU policy on Attendance Regulations, see the web address at: http://www.ncsu.edu/policies/academic_affairs/courses_undergrad/REG02.20.3.php

Out-of-state students are not required to attend the orientation sessions prior to the trip. These students will be sent electronic copies of the lectures and discussions.

12. ACADEMIC INTEGRITY

Students are expected to conform with accepted Academic Integrity standards. The NCSU Academic Integrity Statement is available on the web at: http://www.ncsu.edu/stud_affairs/osc/academic_integrity This is a study abroad program offered through lectures, field lectures, discussions, fieldwork, participation, field excursions, and written homework assignments. Cooperating in fieldwork and taking field notes forms part of the program. However, cooperating on the content of homework assignments is prohibited. Plagiarism - the use of other person's or organization's written materials without attribution or permission - is explicitly forbidden. Further information on student conduct is available at http://www.ncsu.edu/policies/student_services/student_discipline/POL11.35.1.php

13. STUDENTS WITH DISABILITIES

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with Disability Services for Students at 1900 Student Health Center, Campus Box 7509, 515-7653. For more information on NC State's policy on working with students with disabilities, please see the [Academic Accommodations for Students with Disabilities Regulation \(REG02.20.1\)](#)"

Participants on this study abroad program should be in good health and reasonably physically fit due to the nature of the program. Local tour operators used in the host country do not provide facilities for physically impaired clients.

14. RISK ASSUMPTION

A safety, health and emergency plan is available to students prior to departure and can be viewed on <http://cnr.ncsu.edu/fer/fishwild/fwstudab.html>

15. ADDITIONAL EXPENSES

In addition to the program fees, students need to pay for their own air transportation to the destination. Students also need to pay for their travel documents, travel insurance and vaccinations.

16. TRANSPORTATION

Students are required to book and pay their own air tickets. All land transportation, accommodation and meals as per itinerary are arranged and included in the program costs.