



**THE SCHOOL FOR FIELD STUDIES**  
**CENTER FOR WILDLIFE MANAGEMENT STUDIES**  
**KIMANA, KENYA**



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## **EE/SS 302: Environmental Policy and Socioeconomic Values**

Syllabus for Spring 2009

Faculty

**SALATON TOME, MPhil.**

**OFFICE HOURS**

**DAILY 8:00 AM TO 5:00 PM**

**7:00 PM TO 8:30 PM BY APPOINTMENT**

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## **1. COURSE OVERVIEW**

This course explores the social, cultural, economic and political context of the relationship between people and wildlife. The theoretical underpinnings draw on principles from human ecology, ecological anthropology, micro-and macroeconomics, development theory, philosophy and law. To understand present and future wildlife management in Kenya, this course examines influences of traditional attitudes, national land tenure regimes and policy framework, international influences, economic conditions, natural resource potentials and constraints, and regulation on human-wildlife interactions. Wildlife conservation in Kenya and specifically in the Tsavo-Amboseli corridor and dispersal zone, is examined in context of other competing land use alternatives in which its potential economic contribution to enhancing rural livelihoods is weighed against its constraints (e.g., depressed livelihoods associated with human-wildlife conflicts).

## **2. LEARNING OBJECTIVES:**

- Obtain some understanding of environmental policies, regulatory systems and institutional arrangements in natural resource conservation: historical evolution of policies and land tenure regimes – hence create and encourage a deeper appreciation of the complexity of wildlife conservation issues in general, and specifically in Kenya.
- Understand the constraints to conservation of wildlife among resource-poor rural populations
- Show how the economic, socio-political and cultural context of the local community influences possible solutions to land use problems and wildlife conservation in Amboseli-Tsavo corridor and dispersal zone
- Consider and examine models of participatory natural resource conservation e.g., Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).
- Impart skills in practical environmental problem solving (such as participatory resource assessment and social surveys), encourage independent and critical analysis, and evaluation of conservation issues necessary to carry out directed research.
- Encourage interactive learning and experiential education through class discussions, debates, role-playing and exposure to a variety of learning situations and contexts in the field
- Explore strategies and examine options that could mitigate natural resource degradation specifically and environmental deterioration in general.

## **3. CASE STUDIES**

### **Title of Case Study**

Ecological factors and land use influence on conservation of wildlife and other natural resources within the Tsavo West – Amboseli Ecosystem of Southern Kenya

### **Case Study Question**

How can land use practices and resource potentials found in group-ranch land (Kuku-Kimana-Mbirikani), be sustainably managed to enhance the economic livelihood of the local population and at the same time promote wildlife conservation?

## Introduction

Kuku, Mbirikani and to a lesser extent Kimana group ranches comprise extensive areas of land, which are legally registered with title deeds and owned by a known number of individuals mostly from the Maasai community. The area is characterized by a diversity of landscapes and habitats used by wildlife species from Amboseli and Chyulu hills/Tsavo West National parks, and it forms the corridor and dispersal zone between the protected areas. Apart from several permanent rivers fed by springs from Mt. Kilimanjaro and associated swamps, most of this region is largely arid or semi-arid with mean annual rainfall in the range of 300-500 mm. The area has been used traditionally by the Maasai pastoral community to graze their livestock on a communal basis. Because of the arid/semi-arid climate, the Chyulu Hills that mark the eastern boundary of the Kuku and Mbirikani group ranches provide an important dry season grazing area for domestic animals and wildlife species supplemented by swamps.

In recent years, there has been a steady shift in land use from purely pastoral to mixed agro-pastoral systems in the greater within group ranches in southern Kajiado district driven by a variety of socio-economic, cultural and geopolitical factors. There is demand for socio-economic development by the local communities on one hand, and conservation (especially of wildlife resources) on the other. Land use changes taking place in dispersal areas compromise their integrity and quality as habitats for a wide variety of wildlife species, generally posing a serious challenge to conservation of biodiversity in this region. Such hindrances are turning tiny protected areas like Amboseli National Park into ecological islands that cannot sustain natural ecological processes and maintain the high density and diversity of wildlife species using it for dry season grazing.

Since inception in 1968, group ranches have not realized the intended goals, and as a result the Kenya Government has encouraged an active policy towards group ranch subdivision. This notwithstanding the fact most of the group ranches in the country are on arid and semi-arid lands where the greater percentage of the country's livestock and wildlife species are found. Hence, subdivision of group ranches in this region will not only pose a greater threat to conservation of wildlife and other natural resources in the Amboseli-Tsavo region but also undermine pastoralism as a land use system. Partly because of diversity of community interests and socio-political forces, and partly as result of national and regional influences, most group members seem to think that privatization of land ownership guarantees them security of tenure and greater individual benefits from the land. The situation has been exacerbated by the fact that people incur considerable losses due to crop damage and domestic animals killed by wildlife and the current system of non-compensation.

In 1997, the KWS with funding from the European Union put up approximately 61 km-perimeter electric fence enclosing small-scale cultivators in two sites within Kimana group ranch and adjacent private farms as a contribution towards resolving the problem of human-wildlife conflicts in the area. Preliminary indications suggest that there is a new dynamic introduced by the fence in terms of shifting the conflicts to other areas. Within the same corridor, critical wetlands such as Kimana swamp (next to Kimana Wildlife Sanctuary) are also under considerable stress brought about by increase in cultivation. The net effect of these land use activities and possible group ranch subdivision is further fragmentation and could lead to eventual elimination of the wildlife

corridor/dispersal zone. Preliminary work conducted by the School for Field Studies since 1999 shows that depressed economic livelihoods (decline in pastoralism among the Maasai) is the single most significant variable driving land use changes, especially the shift to cultivation. To address the land use issues and promote sustainable use of natural resources, and incorporate wildlife as a land use alternative, integrated land use plans must be elaborated. The initial stage is to conduct research to obtain baseline information and gain a better understanding of the area using a holistic, system approach. Using the provisions of the Physical Planning Act (1996) and Environmental Management and Co-ordination Act (1999), and research data, land use zoning can be achieved through a participatory community based process.

The spring 2009 will finalise the current **five-year research plan (2003-2007) which is being replaced with the next phase.** Under the plan, carefully designed and sequenced research projects are implemented in a systematic fashion examining critical conservation issues within Amboseli-Chyulu hills /Tsavo West National parks system (with emphasis on group ranches in between). These projects focus on baseline assessments, critical analysis and investigation and monitoring aspects of land use changes and associated human-wildlife conflicts, wildlife-habitat requirements, and status of the dispersal area of the ecosystem between Amboseli Park and Tsavo / Chyulu Parks. Ecological aspects of relevance and protected area/human-interactions will be analyzed. The research plan will also address plant resources utilization and associated environmental impacts, resource (water) use competitions; ecotourism and wildlife based benefit systems will be examined; and the rate and factors causing contraction of the Tsavo – Amboseli wildlife dispersal area. Community perspectives on resource use and management, and evolving tenure arrangements (options after group ranch subdivision) will be investigated. Finally, definition of sustainable resource management criteria and indicators for the region will be attempted. Overall, the primary goal of the Center’s research has been and will continue to be the provision of information to guide sustainable natural resource management generally, and promote wildlife conservation specifically. This case study will be the basis upon which all the research projects are anchored. The strategic location of the Kilimanjaro Bush Camp (a campus of SFS-Kenya) allows various aspect of the system to be investigated in terms of cumulative research work both in three-months semester and one- month summer sessions; and collaborative research with other partners.

The topics in this course (and other courses in the program) will address these issues in class, through guest lectures, field lectures and in field exercises.

#### 4. COURSE ASSESSMENT

<b>EP 06</b>	Evaluating land use types in Kimana-Kuku-Mbirikani group ranches	<b>10%</b>
<b>EP 08</b>	Analyzing perspectives on wildlife of communities living in wildlife dispersal areas (PRA II – field exercise)	<b>10%</b>
<b>EP 15</b>	Human Wildlife Conflict: Issues among small scale cultivators in Kimana area	<b>15%</b>
	<b>Quiz</b>	<b>20</b>
	<b>Total EP marks on field exercises and other assignments</b>	<b>55%</b>

	<b>Total EP marks on examinations</b>	<b>45 %</b>
	<b>Total EP Marks</b>	<b>100%</b>

## 5. GRADING SCHEME

<b>A</b> 92.50 - 100%	<b>B</b> +87.50 - 89.99%	<b>C+</b> 77.50 - 79.99%	<b>D</b> 60.00 - 69.99%
<b>A-</b> 90.00 - 92.49%	<b>B</b> 82.50 - 87.49%	<b>C</b> 72.50 - 77.49%	<b>F</b> <60.00%
	<b>B-</b> 80.00 - 82.49%	<b>C-</b> 70.00 - 72.49%	

## 6. GENERAL REMINDERS

**Readings and handouts:** - Assigned readings and hand outs (exercises / assignments) will be available prior to the scheduled activities. Course readings must be read and clarification on issues sought where necessary since ideas and concepts contained in them will be expected to be used and cited appropriately in assigned course essays and research papers.

**Plagiarism** – using the ideas or material of others without giving due credit – is cheating and will not be tolerated. A grade of zero will be assigned for anyone caught cheating or aiding another person to cheat either actively or passively (e.g. allowing someone to look at your exam).

**Deadlines and expectations** - Deadlines for written field exercises and other assignments are posted to promote equity among students and to allow faculty ample time to review and return assignments in good time. As such, deadlines are firm and extensions will only be considered under the most extreme circumstances. Late assignments will incur a 10% penalty for each hour that they are late. This means an assignment that is five minutes late will have 10% removed, an assignment that is one hour and five minutes late will have 20% removed etc.

**Class attendance and participation** - Since we offer a program that is likely more intensive than you might be used to at your home institution, missing even one lecture can have a proportionally greater effect on your final grade simply because there is little room to make up for lost time. Participation in all components of the program is mandatory because your actions can significantly affect the experience you and your classmates have while at CWMS. Therefore, it is important that you are prompt for all course activities.

## 7. COURSE LECTURES AND ACTIVITIES

Code	Titles of Lectures /Field Exercises	Type	Time (Hrs)	Instructor
EP01	Case study introduction	L	3.0	<b>SS/All</b>
EP02	Elements of environmental policy: an overview of issues relevant to Amboseli ecosystem	L	1.5	<b>ST</b>
EP03	The political economy of Kenya	L	2.0	<b>ST</b>
EP04	Introduction to Kuku-Kimana area: resources and land use practices	FL	1.5	<b>ST</b>
EP05	Wildlife policy: evolution and practice in Kenya	L	2.0	<b>ST</b>
EP06	Wildlife and environmental conservation constraints and solutions in the Tsavo-Amboseli Ecosystem: practical implications	FL	4.0	<b>ST/ALL</b>
EP07	Participatory approaches (PRA) I: principles and survey methods	L	2.0	<b>ST</b>
EP08	Analyzing perspectives on wildlife of communities living in wildlife dispersal areas (PRA II – field exercise)	FE	6.0	<b>ST</b>
EP09	Land and resource tenure regimes in Kenya	L	2.0	<b>ST</b>
EP10	The Impact of modern land tenure on the Maasai: The case of Group Ranches; evolution, practice and future options	L	2.0	<b>ST</b>
EP11	Institutional analysis in natural resource management	L	1.5	<b>ST</b>
EP12	Chyulu Hills: resource use interaction, management strategies and future options	FL	1.5	<b>ST</b>
EP13	Local participation and community conservation: the case of ICDPs	L	2.0	<b>ST/Guest</b>
EP14	Pros and cons of community based conservation: analyzing the CAMPFIRE model in relation to community conservation in East Africa.	L	2.0	<b>ST/Guest</b>
EP15	Human-wildlife conflict 1: Issues among small-scale cultivators in Kimana area system	FE	6.0	<b>ST</b>
EP16	Wildlife resource values and utilization	L	1.5	<b>ST</b>
EP17	Land use planning I: the process and basic steps	L	1.5	<b>ST</b>
EP18	Effects of urban development on wildlife conservation: the case of Nairobi National Park.	FL	5.0	<b>ST</b>
EP19	Does Nairobi National Park have a future as viable conservation unit?: present challenges and possible solutions	L	2.0	<b>ST/Guest</b>
EP20	Economic viability of wildlife conservation in Maasai districts	L	2.0	<b>ST/Guest</b>
EP 21	Introduction to Nakuru – Hells gate Field Trip	L	1.5	<b>ST</b>
EP 22	Management Challenges to Lake Nakuru National Park: external impacts and issues		2.0	<b>ST/Guest</b>
<b>Total Hours</b>			<b>51.5 HOURS</b>	

**L** = Classroom lecture   **FL** = Field lecture   **FE** = Field Exercise   **D** = Class discussions   **LE** = Lab exercise

## 8. FIELD EXERCISES

Field Exercise	Hrs	Objectives	Deliverables
<b>EP 06:</b> Wildlife and environmental conservation constraints and solutions in the Tsavo-Amboseli Ecosystem: practical implications	3.0	<ul style="list-style-type: none"> <li>Identify the various forms of land use in selected areas of Kimana/Kuku and Mbirikani Group Ranches</li> <li>Assess the implications of these land uses on the wildlife species in the area.</li> <li>To broadly characterize the various landuses within the system by visiting sites where pastoralism, irrigated and rain-fed agriculture are the dominant land uses</li> <li>Critically examine evidence of environmental degradation and possible causal factors</li> </ul>	<ul style="list-style-type: none"> <li>Each student to write a concise field report on the field trip giving a brief description of key resources, and observed agro-pastoral systems along the gradient. Also based on field observations, comment on wildlife conservation potentials and threats in the area. Details of the assignment are given elsewhere. <b>(Graded out of 10)</b></li> </ul>
<b>EP 08:</b> Analyzing perspectives on wildlife of communities living in wildlife dispersal areas (PRA II – field exercise)	4.5	<ul style="list-style-type: none"> <li>To learn the use of at least two PRA techniques commonly used - transect walks, resource mapping, matrix ranking etc. to identify key resources and problem animals</li> <li>Use the techniques to probe landscape resources and/or community resource-interaction in the vicinity of Kilimanjaro Bush Camp</li> </ul>	<ul style="list-style-type: none"> <li>Groups of 4-5 students will work together to produce a map of land resources around K-B-C or homesteads visited</li> <li>Each group will present results, and discuss the strengths and weaknesses of the technique they used with the rest of the class <b>(Graded out of 10%)</b></li> </ul>

<p><b>EP15:</b> Human Wildlife Conflict: Issues among small scale cultivators in Kimana area</p>	<p>3.0</p>	<ul style="list-style-type: none"> <li>• Identify the various forms of human wildlife conflicts in selected areas of Kimana/Kuku Group Rances</li> <li>• Identify the wildlife species which cause the most damages and estimate the economic losses incurred</li> <li>• Assess the local peoples attitudes towards wildlife in the area</li> <li>• Assess the effectiveness of various wildlife control methods used</li> <li>• Obtain evidence of resource and /or land use conflicts</li> </ul>	<ul style="list-style-type: none"> <li>• The whole class will visit clusters areas and investigate aspects of human-wildlife conflicts and probe resource use (especially water) competition. Land use conflicts e.g., sanctuary next to cultivation and talk to local community where possible. Information obtained in this field exercise will be used to write a concise field report/critique <b>(Graded out of 15%)</b>.</li> </ul>
<p><b>EP18:</b> Effects of urban development on Wildlife conservation: the case of Nairobi National Park.</p>	<p>4.0</p>	<ul style="list-style-type: none"> <li>• To determine the effects of Nairobi city, increasing industrial development and urbanization on the integrity of NNP.</li> <li>• Evaluate the impact of changing land uses and population growth in the Kitengela dispersal area on the future on NNP as an open eco-system.</li> <li>• Data for this exercise will be obtained from available written reports, information from KWS officers, landowners, and direct observation during visits to NNP and Kitengela dispersal area.</li> </ul>	<ul style="list-style-type: none"> <li>• This exercise will involve individual efforts by each student.</li> <li>• Each student will write a short paper critically outlining the urbanization and development effects as follows: <ol style="list-style-type: none"> <li>1. Biological threats including effects on mammals, birds, plants and insects.</li> <li>2. Pollution</li> <li>3. Sociological issues like effects on tourism, conflict between people and wildlife, conflicts of interest among stakeholders (conservationists, developers, politicians, local communities etc).</li> <li>4. Examine approaches that can be utilized to address these threats and issues. <b>(Not graded)</b>.</li> </ol> </li> </ul>

## 9. LECTURE DESCRIPTIONS AND REQUIRED READINGS

CODE	TITLES OF LECTURES /FIELD EXERCISES	REQUIRED READINGS
EP 01	<b>Case Study introduction</b> -----	No readings required
EP 02	<b>Elements of environmental policy: an overview of issues relevant to the Tsavo/Amboseli Ecosystem</b> -----  Provides a framework and rationale behind the course structure and content. The course puts forth SFSs' pedagogical approach and highlights how EP relates with the ecology, natural resource management and socio-cultural classes	No readings required
EP 03	<b>The political economy of Kenya</b> -----  The objective of this class is to provide the context within which most the events occur. It achieves this by examining the economic and socio-political conditions of the eastern African region in general and more specifically Kenya	<p>Holmquist, W. F., F. S. Weaver and M. D. Ford. 1994. The Structural Development of Kenya's Political Economy. African Studies Review, Volume 37, Number1 pp 69-105 <b>(Required)</b>.</p> <p>Ogolla, B. D. and J. Mugabe 1996. Land tenure systems and natural resource management. In: Juma, C. and J. B. Ojwang (eds.), In Land We Trust: Environment, Private property and Constitutional Change. ACTS Environmental Policy Series No. 7. Initiative publishers. Nairobi. pp 85 – 116 <b>(Suggested)</b></p>
EP 04	<b>Introduction to Kuku-Kimana area: resources and land use practices</b> .....  This class, which is delivered in the field, exposes the students to the physical and socio-economic condition of the ecosystem. In particular, it explores the role of resources in the livelihood of the local community	Berger, D. 1993. Wildlife Extension: Participatory Conservation by the Maasai of Kenya. ACTS Environmental Policy Series No. 4. pp 5 – 45 <b>(Required)</b> .
EP 05	<b>Wildlife policy evolution and practice in Kenya</b> -----  In Kenya the past century has been tumultuous as it regards to wildlife policy and other relevant infrastructure. In order to understand the current	Kameri-Mbote, P. 2003. Property Rights and Biodiversity Management in Kenya. ACTS. Initiative Publishers. Nairobi. Pp 83-122. <b>(Required)</b> .

	<p>situation, it is important that these occurrences are put in perspective. This class does this by tracing the evolution of wildlife policy and the concomitant effects.</p>	<p>Akama, J. S. 1998. The evolution of wildlife policies in Kenya. <i>Journal of Third World Studies, Issue 2: 103-117. (Suggested)</i></p> <p>Mwale, S. 2002. Changing relationship: The history and future of wildlife conservation in Kenya. Swara 22(4) pp11-17 <b>(Suggested)</b></p>
EP 06	<p><b>Wildlife and environmental conservation constraints and solutions in the Tsavo-Amboseli Ecosystem: practical implications</b></p> <p>.....</p> <p>This course which is hosted jointly by the three faculty (Wildlife Ecology, Wildlife management and Environmental policy), looks at different issues of importance to the region from different perspectives. This affords the students an opportunity to see first hand the advantages of an interdisciplinary approach</p>	<p>Berger, D. 1993. Wildlife Extension: Participatory Conservation by the Maasai of Kenya. ACTS Environmental Policy Series No. 4. pp 5 – 45 <b>(Required)</b>.</p>
EP 07	<p><b>Participatory approaches (PRA) I: principles and survey methods</b></p> <p>-----</p> <p>This course chronicles the factors which led to the adoption of participatory approaches and also provides its conceptual foundation. In addition it takes students through some of the most commonly used techniques.</p> <p>-----</p>	<p>Kumar, S. 2002. Methods for Community Participation: A complete Guide for Practitioners. ITDG Publishing. London pp23 – 52 <b>(Required)</b></p> <p>Drijver, C. 1994. Participatory Rural Appraisal (PRA): a challenge for people and protected areas. Parks 4(1): 35 – 40. <b>(Suggested)</b></p>
EP 08	<p><b>Analyzing perspectives on wildlife of communities living in wildlife dispersal areas (PRA II– field exercise)</b></p> <p>This is a field exercise which imparts skills in practical environmental problem solving. Students are assigned different participatory tools which they use to collect information that is then synthesized in class.</p> <p>-----</p>	<p>Kumar, S. 2002. Methods for Community Participation: A complete Guide for Practitioners. ITDG Publishing. London pp23 – 52 <b>(Required)</b></p> <p>Drijver, C. 1994. Participatory Rural Appraisal (PRA): a challenge for people and protected areas. Parks 4(1): 35 – 40. <b>(Suggested)</b></p>
EP 09	<p><b>Land and resource tenure regimes in Kenya</b></p> <p>-----</p> <p>In Kenya land and resource tenure is still at its nascent stage. Considering its implication on natural resource conservation and management, this class charts out the current arrangement while at the same time highlighting its impact on wildlife conservation</p>	<p>Ogolla, B. D. and J. Mugabe. 1996. Land tenure systems and natural resource management. In: Juma, C. and J. B. Ojwang (eds.), In Land We Trust: Environment, Private Property and Constitutional Change. ACTS Environmental Policy Series No. 7. Initiative Publishers. Nairobi. pp 85-116.</p>

		<b>(Required).</b>
<b>EP 10</b>	<p><b>The Impact of modern land tenure on the Maasai: The case of Group Ranches; evolution, practice and future options</b></p> <p>.....</p> <p>The objective of this class is to explore in details the evolution and operationalization of the Group Ranch land tenure regime and its subsequent impact on socio-economic fabric of the local community as well as its ramification on wildlife conservation .</p>	<p>Seno, S.K. and Shaw W.W. 2002. Land Tenure policies, Maasai traditions and wildlife conservation in Kenya. Society and Natural Resources. 15:79-88</p> <p><b>(Required)</b></p> <p>Ogolla, B. D. and J. Mugabe. 1996. Land tenure systems and natural resource management. In: Juma, C. and J. B. Ojwang (eds.), In Land We Trust: Environment, Private Property and Constitutional Change. ACTS Environmental Policy Series No. 7. Initiative Publishers. Nairobi. pp 85-116.</p> <p><b>(Suggested).</b></p>
<b>EP 11</b>	<p><b>Institutional analysis in natural resource management</b></p> <p>-----</p> <p>With the current emphasise on devolution of natural resource management to lower levels of the society, this class identifies and examines in general terms local institutional arrangements in natural resource management</p>	<p>Mearns, R. 1995. Institutions and natural resource management: access to and control over woodfuel in East Africa. In: T. Binns (ed.), People and Environment in Africa. John Wiley &amp; Sons Ltd. London. <b>(Required)</b></p>
<b>EP 12</b>	<p>Chyulu Hills: resource use interaction, management strategies and future options</p> <p>.....</p> <p>Though the Chyulu Hills are a very important resource, its management has been beset by numerous problems mostly as a result of contest between the local peoples' definition vis-à-vis that of the other stakeholders. This class looks at how these issues arose and ends by highlighting possible avenues which can be used to resolve the impasse.</p> <p>-----</p>	<p>Tome, Salaton and Moses Okello. 2007. The Chyulu Hills: raison d'être and consequences of contested proprietorship of an idyllic oasis</p>
<b>EP 13</b>	<p><b>Local participation and community conservation: the case of ICDPs</b></p> <p>-----</p> <p>This class examines why the involvement of local people/communities in wildlife conservation is essential and how this reintegration has been achieved in different parts of the world.</p>	<p>Sibanda, B.M.C, and A.K Omwega 1996. Some reflections on conservation, sustainable development and equitable sharing of benefits from wildlife in Africa: the case of Kenya and Zimbabwe. South African Journal of Wildlife Research, 26(4): 175 –181.9 <b>(Suggested)</b></p> <p>Hackel, D. J. 1998. Community conservation</p>

		and the future of Africa's wildlife. Conservation Biology 13: 726 – 734 <b>(Required)</b>
EP 14	<p><b>Pros and cons of community based conservation: The case of CAMPFIRE</b></p> <p>-----</p> <p>To further assess success and shortfall of community conservation this class examines the process and achievement of CAMPFIRE a 'successful' community conservation initiative in Zimbabwe. It then looks at the opportunities and challenges which might be encountered when such a model is adapted to the Kenyan context</p>	<p>Goldman, Mara. 2003. Partitioned Nature, Privileged Knowledge: community-based conservation in Tanzania. <i>Development and Change</i> (5) 34 833-862 <b>(Required)</b></p> <p>Songorwa, N.A. 1999. Community based wildlife management (CWM) in Tanzania: are communities interested: <i>World Development</i> 27 (12): 2061 – 2079.</p> <p>Logan, I. B. and W. G. Moseley 2002. The political ecology of poverty alleviation in Zimbabwe's Communal Areas Management Programme for Indigenous Resources (CAMPFIRE).</p>
EP 15	<p><b>Human-wildlife conflict: Issues among small-scale cultivators within the Kwakuchinja corridor</b></p> <p>-----</p> <p>This will involve visiting agricultural clusters and investigating aspects of human-wildlife conflicts. From their interaction with the local community students will identify the various forms of human wildlife conflicts, the wildlife species which cause the most damages and estimate the economic losses incurred while. At the same time they will be assessing the local peoples' attitudes towards wildlife in the area</p>	<p>Kenya Wildlife Service. 1994. Human wildlife conflict in Kenya. <b>(Required)</b></p> <p>Campbell, D.J., H. Gichohi, A. Mwangi and L. Chege 2000. Land use conflict in Kajiado District, Kenya <i>Land Use Policy</i>, 17: 337-348. <b>(Required)</b></p> <p>AWF. 2001. Developing the Tanzania Land Conservation Trust. A proposal to USAID</p> <p>Thouless, C. R., and J. Sakwa, 1995. Shocking elephants: fences and crop raiders in Laikipia District, Kenya. <i>Biological Conservation</i> 72: 99-107 <b>(Required)</b></p> <p>Kangwana, K. Assessing the impact of human-elephant interactions. African Wildlife Foundation Report. Nairobi. <b>(Suggested)</b>.</p> <p>Barnes, R. W. W. 1996. The conflict between humans and elephants in the central African forests. <i>Mammal Rev. Vol. 26, No.2/3, 67-80. (Suggested)</i></p> <p>Naughton-Treves, L.1998. Predicting patterns of crop damage by wildlife around Kibale National Park, Uganda. <i>Conservation Biology</i>, 12(1): 156-168. (Suggested)</p>
EP 16	<p><b>Wildlife resource values and utilization</b></p> <p>-----</p> <p>With wildlife increasingly being viewed as just another</p>	<p>Emmerton L. 2001. The Nature of Benefit and the Benefit of Nature. In: D. Hulme and M. Murphree, ed. African wildlife and Livelihood Conservation. <b>(Required)</b></p>

	<p>economic commodity, this class provides an overview of the various biodiversity values and the implication of commodification of natural resources on conservation.</p>	<p>Gowdy, M.J.1997. The value of biodiversity: markets, society, and ecosystems. Land Economics, 73(1): 25-41. <b>(Suggested)</b></p>
<p><b>EP 17</b></p>	<p><b>Land use planning: the process and basic steps</b></p> <p>-----</p> <p>Land use planning has been identified as one the tools which can be used to resolve complex issues associated with conflicting land uses. This class provides one with an overview of the planning process and the entities that are involved</p>	<p>Kuykendall, N., A. Kijazi and D.M. Thompson, 1997. The Ngorongoro Conservation Area general management plan process. In: D.M. Thompson (Ed.) Multiple Land-Use: The experience of Ngorongoro Conservation Area, Tanzania. The World Conservation Union (IUCN), pp377-396 <b>(Required)</b></p> <p>Alpert, P. 1996. Integrated conservation and development projects. BioScience 46 (11): 845-855. <b>(Suggested)</b></p> <p>MacKinnon, J. and K., G. Child and J. Thorsell, 1986. Integrating protected areas in regional land-use programmes. Chapter 5: 73-98. In: Managing Protected Areas in the Tropics. IUCN, Gland, Switzerland. <b>(Suggested)</b></p>
<p><b>EP 18</b></p>	<p><b>Effects of urban development on wildlife conservation: the case of Nairobi National Park.</b></p> <p>.....</p> <p>This is a filed lecture whose objective is to expose students to effect of a rapidly expanding metropolis on wildlife conservation especially as it relates to maintaining the viability of an adjacent protected area such as Nairobi National Park.</p>	<p>Kenya Wildlife Service. 1994. Human wildlife conflict in Kenya. (Required)</p> <p>Campbell, D.J., H. Gichohi, A. Mwangi and L. Chege 2000. Land use conflict in Kajiado District, Kenya Land Use Policy, 17: 337-348. (Required)</p> <p>Harris, K.L., W.W. Shaw and J. Schelhas 1997. Urban Neighbors' wildlife related attitudes and behaviours near Federally protected areas in Tucson, Arizona, USA. Nature Areas Journal 17 (2): 144-148 <b>(Required)</b></p>
<p><b>EP 19</b></p>	<p><b>Does Nairobi National Park have a future as viable conservation unit?: present challenges and possible solutions</b></p> <p>.....</p> <p>This class is delivered by a Kenya Wildlife Service official who is in-charge of Nairobi National park. It provides the students with account first hand account of the intricacies and managing a park which borders an expanding city.</p> <p>-----</p>	<p>Round Turner, D. 1996/1997. Focus on Nairobi National Park. Swara 19(6): 12-15. <b>(Required)</b></p> <p>Morell, V. 1996. Surrounded! Civilization is encroaching on Nairobi National Park (Nairobi wild side), International Wildlife 27 (4): 38-44. <b>(Required)</b></p> <p>Western, D. 1997. Nairobi National Park</p>

		is slowly being strangled by development. Swara 19(6) and 20(1):19-20 <b>(Required)</b>
<b>EP 20</b>	<p><b>Economic viability of wildlife conservation in Maasai districts</b></p> <p>.....</p> <p>The objective of this class is to explore the economic options and viability of engaging in wildlife related livelihood strategies in regions dominated by the Maasai.</p> <p>-----</p>	<p>Norton-Griffths, M. 1996. Property rights and the marginal wildebeest: an economic analysis of wildlife conservation options in Kenya. <i>Biodiversity an Conservation</i>, 5:1557 – 1577. <b>(Required)</b></p> <p>Emmerton L. 2001James Curry. The Nature of Benefit and the Benefit of Nature. In: D. Hulme and M. Murphree, ed. <i>African wildlife and Livelihood Conservation</i>. <b>(Required)</b></p>
<b>EP 21</b>	<p><b>Introduction to Nakuru – Hells gate Field Trip</b></p> <p>.....</p> <p>This class introduces the student to conservation issues in the central and north rift.</p> <p>-----</p>	TBA
<b>EP 22</b>	<p><b>Management Challenges to Lake Nakuru National Park: external impacts and issues</b></p> <p>.....</p> <p>Though Lake Nakuru is one of the most important biodiversity in this country, the integrity of the ecosystem is being threatened by a high rate of conversion of the catchment area to agriculture and other land uses which are inimical to environmental conservation. This class provides student the current situation and what is being done to alleviate the pressure</p>	TBA