

Human Dimensions of Endangered Species SFS 3072

Syllabus 4 Credits

The School for Field Studies (SFS)
Center for Endangered Species Conservation

Kimana, Kenya

This syllabus may develop or change over time based on local conditions, learning opportunities, and faculty expertise. Course content may vary from semester to semester.

COURSE CONTENT SUBJECT TO CHANGE

Please note that this is a copy of a recent syllabus. A final syllabus will be provided to students on the first day of academic programming.

SFS programs are different from other travel or study abroad programs. Each iteration of a program is unique and often cannot be implemented exactly as planned for a variety of reasons. There are factors which, although monitored closely, are beyond our control. For example:

- Changes in access to or expiration or change in terms of permits to the highly regulated and sensitive environments in which we work;
- Changes in social/political conditions or tenuous weather situations/natural disasters may require changes to sites or plans, often with little notice;
- Some aspects of programs depend on the current faculty team as well as the goodwill and generosity of individuals, communities, and institutions which lend support.

Please be advised that these or other variables may require changes before or during the program. Part of the SFS experience is adapting to changing conditions and overcoming the obstacles that they may present. In other words, this is a field program, and the field can change.

Course Overview

Biodiversity encompasses the variety of different kinds of living organisms on the earth's surface including plants, animals (vertebrates and invertebrates), fungi, and microbes (viruses and bacteria). It also includes species diversity, genetic diversity, and diversity of terrestrial and aquatic ecosystems, together with their associated evolutionary and ecological processes. Fundamentally, biodiversity makes human life on earth possible, and it has many values, some intrinsic and others utilitarian. The intrinsic value of biodiversity refers to its inherent worth, which is independent of its value to humans, especially for economic benefit, and essentially its inalienable right to exist on the earth's surface. For instance, biodiversity is an integral part of ecosystems that provide key ecological life supporting services such as nutrient cycling, water purification, pollination, carbon sequestration and climate regulation. For utilitarian values, biodiversity constitutes a panoply of resources from which humans can obtain a wide range of benefits including fuel, medicine, food, shelter, and raw materials for industries. Nature-based tourism, for example, benefits directly from the recreational value of biodiversity. Biodiversity has profound influence in shaping who humans are, how humans relate with each other and the world around them in various contexts, producing unique and diverse cultures. Likewise, humans, through various cultural, political, and socio-economic activities shape biodiversity resulting in multiple consequences. Politics, markets and capital and religion are integral in shaping use or misuse; conservation or destruction of biodiversity around the world.

While the "Age of the Anthropocene" is still debatable in various social science disciplines, what remains steadfast is that humans have changed our world in ways that have negatively affected species, rendering some extinct, while others endangered and on the verge of extinction. Each species that is lost triggers the loss of other species within landscapes or ecosystems. Poor politics, globalization and market capitalism are largely blamed for species decline in the world today. The decline and extinction of species also means loss of livelihoods and change in cultural practices for indigenous human communities around the world. Policy, technological and market-based interventions to abate the loss or vulnerability of species require meaningful and just cross-country collaboration, participation of local communities, change in production and consumption patterns, and respect to human rights and cultural diversity. Where interventions have contravened these principles, conservation of endangered species have resulted into further species decline, human conflicts, violence, dispossession of indigenous and local communities, economic inequalities, and violation of human rights. New conservation efforts, at least since "sustainable development" emerged as a buzzword, must consider a balance of human and non-human species concerns. North-South and South-South collaborations must be meaningful and embrace equal treatment, and local communities who coexist with endangered species must be integrated in the conservation agenda and efforts and considered as conservationists in their own right.

Conservation is, therefore, a deeply human endeavor in multiple dimensions. Humans influence nature that they are part of, and nature also plays a role in shaping humans social, economic, and political world. Conservation cannot, therefore, be fully understood and practiced from a pure natural science perspective. Exploring human dimensions of conservation, using heuristic tools and concepts from social sciences, is indeed essential in realizing the desired holistic approach needed to restore biodiversity to pre-1970s levels. This course will focus on the human dimensions of conservation of endangered species in Kenya. The course will examine and expand the students' understanding of the multiplex relationships between people, the endangered species, and their environment, including associated natural resources. In the process, it will explore how people's behavior, values and knowledge influence and are affected by decisions on management of endangered species. The overarching question to be addressed is how to achieve a healthy interaction between politics,

economics, cultures, and technology so that populations of endangered species are conserved and restored in a manner that values humans wellbeing as well. The course will use a wide range of social sciences knowledge and tools, but mostly Anthropology and Political Ecology, to effectively incorporate societal values into conservation planning, technology, and decision-making around selected endangered species in Kenya, and to build stronger and more diverse partnerships. Students will also learn human dimensions concepts, the tools and methods that can be used in conservation research, outreach, and communication.

Course Case Study

Across the globe, Kenya is renowned for its rich biodiversity that span the air, water, and land; a key natural wealth that makes the country a conservation hub and tourism destination. Historically, there was less concern about the conservation of the country' biota resources and their habitats, but this has rapidly changed in the last decades, and many species are at risk of being extinct. Some key causes of decline in population of some species are linked to anthropogenic causes such as overhunting or overharvesting, impacts of native species, emergence of diseases, habitat degradation or loss. Other causes for the decline are inherent demographic and genetic phenomena of some species themselves like the cheetah, and more recently climate change. Recent evidence suggests that deforestation and habitat destruction are prime direct and indirect causes of reported rampant decline in numbers of many species in the country. Overexploitation (hunting, bush meat, illegal killing due to human wildlife conflicts, conversion of wildlife dispersal areas and blocking of migration corridors) are also important drivers of large mammal decline. Countrywide infrastructure and expansion of human settlements have equally become key drivers of species loss.

Kenya's first National Wildlife Census in 2021 revealed that there are dangerously few numbers of some wildlife iconic species, including the black rhino. The census, which lasted three months, established that 5 species are "critically endangered". These are: Tana River Mangabey, with 1,650 individuals, Black Rhinoceros (897 individuals), Hirola antelope (497 individuals), Sable Antelope (51 individuals), and Roan Antelope with 15 individuals. According to the IUCN criteria, this designation corresponds to the highest degree of risk, indicating these species have a 50% likelihood of going extinct within ten years or three generations. The census also established relatively low numbers of 9 species which have been classed as "endangered". These are: African elephant, African lion, Cheetah, White Rhinoceros, Eastern Mountain bongo, Grevy's Zebra, African Wild Dog, Nubian Giraffe and Sitatunga. In the list of species of concern are: Lesser Kudu, hippopotamus, Thomson's gazelle and generally all species of giraffes. The striped hyaena, sitatunga, leopard, white rhino, Lelwel hartebeest and Rothschild's giraffe are also listed in multiple sources as species of conservation concern due to declining numbers. Lions, leopards, and elephants are listed as 'vulnerable' in the IUCN Red List but as endangered according to Kenya's principal conservation law, the Wildlife Conservation and Management Act (Kenya 2013), because of their immense value in conservation and tourism in the country.

This course zooms into endangered large mammals because, in Kenya, these currently dominate political and academic discussions around conservation. For instance, human wildlife conflicts that threaten conservation largely is largely associated with many of these endangered large mammals than in other megafauna and flora. Land tenure transformation that has seen an expanding agriculture in conservation areas tend to affect the habitats and behavior of endangered large mammals. For example, migration of African elephants populates the many policy and academic debates on opening of wildlife corridors. Illegal trade on live wildlife and wildlife parts are often common with the large mammals, including cheetah, Rhino and African elephants. Therefore, while this course will generally look at endangered species, specific attention is given to large mammals because of prevailing discourse around them in Kenya.

The conservation areas of focus in this course are:

- Amboseli ecosystem, in southwest Kenya, which is home to some of the few remaining large tuskers (African elephants with huge tusks). Maasai rangeland of the Amboseli ecosystem is undergoing major land use changes since land subdivision that gave way to expansion of irrigated agriculture. The Amboseli ecosystem has also seen some of the most vibrant interventions on human-elephant conflicts.
- 2. Maasai Mara ecosystem, which is one of the key tourist destinations of in Kenya, is home to endangered and iconic species including African lions, cheetah, and Black rhino. Unethical tourism in Maasai Mara has direct effect on Cheetah conservation. Maasai Mara ecosystem is home to some of the best community conservancies and demonstrate success stories of involving Maasai communities in conservation. In addition, Maasai Mara is part of the larger Mara-Serengeti ecosystem, and therefore presents a good case for understanding cross-border collaborations in conserving endangered large mammals.
- 3. Lake Nakuru National Park, in Rift Valley, which borders Nakuru city, is a closed ecosystem where Rhinos are conserved and bred.
- 4. Laikipia Conservation area in Central Kenya, where the largest populations of both black and white rhinos can be found in Kenya. Laikipia is home to Kenya's private conservancies. Land tenure in Laikipia is embedded in Kenya's colonial history and therefore adds a different political debate in the conservation of endangered species.

In these diverse landscapes, students will examine how past and contemporary pastoral and agropastoral societies in Kenya (Maasai and Samburu) coexist with endangered species. Learning will also dive into the role of institutions (laws and policies and organizational networks) in shaping present day conservation efforts of endangered species in Kenya. Established and emerging issues including community conservation, human wildlife conflicts, gender dynamics, wildlife enterprises, international crimes, securitization and remilitarization of conservation, animal rights and justice will be explored in relation to endangered species such as Black Rhino, White Rhino, African Elephants, African Lions, Cheetah, Rothchild Giraffes, Chimpanzees etc. Students will examine the influence of traditional beliefs and attitudes in natural resource use and conservation practices to understand the current and future management of natural resources in the region. The influence of modern lifestyle, market capitalism, conservation and management practices, national policies and laws as well as land uses and sociopolitical and economic changes among the Maasai people will be evaluated.

Learning Objectives

This course takes the perspective that conservation landscapes are the co-produced outcome of human and ecological processes that interact across scales. The goal will be to understand what factors influence people's different interactions with endangered species, and how social sciences' heuristic tools and knowledge can be harnessed to ensure sustainable management and conservation of endangered species. At the end of this course students will be able to:

- 1. Use social science research tools and concepts in studying and understanding conservation of endangered species.
- 2. Examine how challenges and opportunities of conserving endangered species in local contexts are embedded in global and national political and economic processes.
- 3. Appraise local and community-centered approaches to solving challenges facing conservation of endangered species.

- 4. Investigate how the socio-economic, cultural, and political context of local communities can influence solutions to resources which they share with endangered species e.g., land, water, vegetation, salt licks etc. in Kenya's conservation areas.
- 5. Design, using knowledge from social sciences, strategies that contribute to solving anthropogenic problems facing conservation of endangered species in our world today.

Assessment

The evaluation breakdown for the course is as follows:

Assessment Item	Value (%)
Integration of storytelling methods for endangered species conservation	20
Local communication and elephant and lion surveillance networks	15
Presentations on Human-elephant conflicts in Amboseli	15
Ethical Tourism Debate	5
Ecofeminism and Environmental Justice Movement in Kenya	5
Participation	10
Final Exam	30
TOTAL	100

Learning Objective	Evaluation level	Assessment
Use social science research tools and concepts in studying and understanding conservation of endangered species.	Apply	 FEX on communication and surveillance networks in reducing crime on elephants and lions FEX on human-elephants' conflicts in the AE ecosystem Class discussions Exam
Examine how challenges and opportunities of conserving endangered species in local contexts are embedded in global and national political and economic processes.	Analyze	 Class discussions Student presentation on human-elephant conflicts Exam
Appraise local and community- centered approaches to solving challenges facing conservation of endangered species.	Evaluate	 Class discussions Student presentation on human-elephant conflicts Student debate on ethical tourism Exam
Investigate how the socio-economic, cultural, and political context of local communities can influence solutions to resources which they share with endangered species e.g., land, water, vegetation, salt licks etc. in Kenya's conservation areas.	Create	 FEX on local communication and surveillance networks in reducing crimes on elephants and lions FEX on human-elephant conflicts in the AE ecosystem
Design, using knowledge from social sciences, strategies that contribute to solving anthropogenic problems facing conservation of endangered species in our world today.	Create	 Semester-long assignment to design a 15-minute video where story telling is used to educate public about conservation of endangered species Students design and pitch project ideas where they apply philosophies of Nobel Laureate Prof. Wangari Maathai in solving problems facing selected endangered species in Kenya or in the US

Integration of storytelling methods for endangered species conservation (20%)

Students are required to make short video clips, compile, and edit into 15-minute educative film on selected endangered large mammals. They are required to employ storytelling techniques in educating the audience. They record the short clips during field exercises for all the courses, expeditions, home stays and park visits. Students then compile the video clips into one film of 15 minutes. During HDE 23, students show their 15-minute film to an audience comprising of fellow students, faculty, and a few invited stakeholders. Finally, students will upload the video on YouTube channel for SFS Kenya.

Local communication and elephant and lion surveillance networks (15%)

In this field exercise, students undertake mini research on effectiveness and sustainability of local communities' involvement in monitoring illegal activities around elephants in Amboseli ecosystem. The research will involve interviewing communities and officers of conservation NGOs and KWS. Students will write a 6-page paper for grading.

Presentations on human-elephant conflicts in Amboseli (15%)

Students will conduct a small survey with farmers in villages in Former Kimana Group Ranch. Students will develop and digitize KoBo Collect or ODK Surveys. Students will then use the digitized survey to collect data on human-wildlife conflicts, their nature, scope, and local mitigation measures. Students will be required to work in groups to analyze the data and make a presentation in class for grading.

Ethical Tourism Debate (5%)

This exercise follows a Traveling lecture on impacts of tourism on engendered species in Maasai Mara ecosystem. At the end of the lecture, students are required to argue for or critique the notion of ethical tourism in conserving iconic endangered species (elephants, rhino, cheetah, lions and leopard) in Maasai Mara ecosystem.

Ecofeminism and Environmental Justice Movement in Kenya (5%)

Students will watch a film about the contribution of the late Nobel Laureate Prof. Wangari Maathai. Students are thereafter divided into workgroups. Each work group is given prompts on a problem facing conservation of selected endangered species in Kenya. They are asked to pitch ideas, for 5 minutes, on how they can use lessons learnt from the film to solve the problem. A judge bench of 3 faculties reviews the ideas pitched by groups of students and give feedback thereupon.

Participation (10%)

Everybody should be prepared for each academic session. This implies reading the materials for each session with enough detail to be able to ask relevant questions and to participate in analytical discussions about the key issues. Active participation during classes, discussions, assignments, and hikes is expected.

Final Exam (10%)

The exam will comprise of 5 short answer questions and essay questions. Students will be required to answer any 3 of the 5 questions provided. Students will be expected to demonstrate an understanding of complex issues around human dimensions of endangered species conservation and to locate them in their political, economic, and cultural contexts as appropriate.

Grading Scheme

Α	95.00 - 100.00%	B+	86.00 - 89.99%	C+	76.00 - 79.99%	D	60.00 - 69.99%
A-	90.00 - 94.99%	В	83.00 - 85.99%	С	73.00 - 75.99%	F	0.00 - 59.99%
		B-	80.00 - 82.99%	C-	70.00 - 72.99%		

General Reminders

Readings – 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 – 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% of the grade deducted.

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 your experience and that of your classmates have while at CWWS. Therefore, it is important that you are prompt for all course activities.

Course Content

Type: L: Lecture, **FL:** Field Lecture, **GL:** Guest Lecture, **FEX:** Field Exercise, **F:** Film, **D:** Discussion *Readings in **Bold** are required.

No	Title and outline	Туре	Time	Readings
1	Introduction to SFS Kenya program	L	50 mins	
	This lecture will introduce students to the human aspects			
	and ethnic composition in Kenya's key conservation			
	areas. The lecture focuses on general livelihoods and			
	human activities that impinge on conservation of			
	endangered species in Kenya, especially the Amboseli,			
	Maasai Mara, Lake Nakuru and Laikipia ecosystems.			
2	Anthropological factors of species decline in former	L	1 hour,	
	Kimana and Imbirikani Group Ranches		40 min	
	This travelling lecture will explore issues related to land			
	tenure transformation, changes in settlement patterns,			

No	Title and outline	Туре	Time	Readings
	cultural beliefs about species and how these affect species decline in the Amboseli ecosystem. It involves a drive through the former Kimana Group Ranch and Imbirikani during which Faculty will make strategic stops to demonstrate to the students the following: land uses, water resources availability, Maasai homesteads and their lifestyle and general state of the landscape environment. This lecture and HDE 01 will collectively ground students in understanding the human dimensions of the ecosystem and their influence on conservation.			
3	Historical background of conservation practice and thought Film: A place without people (54 min) This film tackles the history of creation of world-famous conservation areas in Africa, and the associated human rights issues. Focusing on Tanzania's Serengeti and Ngorongoro parks, the film shines a light on the intersection of conservation, land use, community livelihoods and the tourism industry, which has similarities with Kenya.	FL	1 hour, 40 min	Nelson (2003). Cockerill, K., & Hagerman, S. (2020). Kothari et al. (2013). Knowles, J. N., & Collet, D. P. (1989).
4	Land tenure regimes in Kenya, Land Use Changes, and their impacts on conservation of endangered species In Kenya land and resource tenure is still at its nascent stage. This classroom lecture will trace land tenure transformation in Kenya, since the colonial times to current situation, and how these changes in land tenure impinge on the conservation of species of concern.	L; F	1 hour, 40 min	Groom and Western (2013). Mwangi & Ostrom (2009). Kantai (2007). Veit (2011).
5	Integrating storytelling in the science of conserving endangered large mammals in Kenya In this lecture, the faculty discusses storytelling as a useful tool that conservation scientists and managers can use to educate, in compelling ways, a wider audience on the dynamics of conserving endangered large mammals in Kenya. Examples are discussed in class and thereafter faculty gives a semester-long assignment. Students are required to work in groups throughout the semester to create a 10 -15 -minute film in which they use storytelling methods to educate a digital audience about endangered species of their choice. To film scenes and landscapes, students will integrate this assignment in all Field Exercises, Expeditions and Guest Lectures, for all the courses. Students will create a YouTube Channel for Kenya Program and upload the films there. On the last day, Faculty and some stakeholders are invited to watch and review the films.	L	1 hour, 40 min	Green, S. J., Grorud-Colvert, K., & Mannix, H. (2018). Shreedhar, G. (2021). De Groot, W. T., & Zwaal, N. (2007). Hughes, C. (2013).

No	Title and outline	Туре	Time	Readings
6	Global, regional, and national legal and policy	L	1 hour,	Duffy, R. (2014).
	instruments on endangered species		40 min	Duffy, R. (2013).
	This classroom lecture critically examines some of			Büscher, B. (2018).
	treaties, laws and policies that govern the conservation			
	and interaction with endangered species. These may			Akama, J. S. (2007).
	include CITES, East African frameworks on the			Otianga-Owiti, G.
	conservation of the elephants, rhinos and endangered			E., et al. (2021).
	cats, Kenya's Wildlife Conservation and Management Act.			Wiggins, S. A.
	Etc. Focus will also be on the international collaboration			(2021).
	on the enforcement of these instruments. Students will			
	watch a film to learn how the enforcement of these laws			
7	and policies intersects with human rights concerns. Local communication and surveillance networks in	1	1 hour	Nielsen M. D. 9
/	reducing crimes on elephants and lions	L	1 hour, 40 min	Nielsen, M. R., & Lund, J. F. (2012).
	This classroom lecture prepares students for a Field		40 111111	Lulia, J. F. (2012).
	Exercise. Some of the approaches that conservation			
	NGOs use to involve communities in motoring illegal			
	activities around species of concern are introduced.			
	These include community game guards, community			
	rangers and lion ambassadors. Faculty will guide students			
	to prepare data collection tools for the exercise.			
8	Local communication and surveillance networks in	FEX	4 hours	
	reducing crimes on elephants and lions			
	In this field exercise, students undertake mini research on			
	effectiveness and sustainability of local communities'			
	involvement in monitoring illegal activities around			
	elephants in Amboseli ecosystem.			
9	Human-Wildlife Conflicts (HWC) in Kenya	L; F	1 hour,	Long, H., et al.
	This lecture will be centered on the intricacies of Human-		40 min	(2020).
	Wildlife Conflicts in Kenya. Key concepts will be defined			Okello (2005).
	and the general nature scope of HWCs in Kenya will be			Muthui (2018).
	discussed. Students will watch two short films. The			Mukeka, Joseph et
	faculty will then help students to prepare data collection tools for the next field exercise.			al (2018).
10	Human-Elephant Conflicts (HECs) in the Amboseli	FEX	4 hours	,
10	Ecosystem	FEX	4 110013	
	Students will assess the typology of HECs among smaller			
	scale farmers, their causes, patterns, impacts and			
	mitigation. In HDE 09, Faculty will have guided students			
	how to; design interview schedule for Key Informant			
	Interviews, conduct Key Informant Interviews, synthesis			
	and analysis of the data information gathered.			
11	Seminar	FL;	1 hour,	
	Students'20-minute presentation from the Field Exercise	GL	40 min	
	on Human-Elephant Conflicts (HECs) in the Amboseli			

No	Title and outline	Туре	Time	Readings
	Ecosystem: This Seminar will be done during the Expedition in Amboseli National Park.			
12	Innovations in mitigating human-lion conflicts in Amboseli ecosystem In this field lecture students learn ways through which Born Free Foundation is reducing conflicts between Massai pastoralists and lions through predator-proof boma (livestock enclosures). Students also learn from a project of lion-lights projects set up by two former SFS students.	L	2 hours, 30 min	Parmisa, N., & Reid, R. S. (2021). Manoa, D. O., & Mwaura, F. (2016). Manoa, D. O., et al. (2020). Manoa, D. O., et al. (2023). Okemwa, B., et al. (2018).
13	Lion hunting and contemporary Maasai <i>rite de passage</i> A guest from Big Life Foundation gives an introductory lecture about traditional lion hunting as a <i>Rite de passage</i> . Students will then watch a film about current alternative forms of <i>rite de passage</i> for Maasai Morans that have replaced lion hunting. Students will learn how these new forms of <i>rite de passage</i> of Maasai Moran have contributed to lion conservation. These will include Maasai Olympics.	L	1 hour, 40 min	Meguro, T. (2017). Meguro, T. (2019).
14	Commodification of nature: The political economy of ivory and live animal trade In this lecture students will learn about factors that mediate market-embedded crimes on endangered species. Local and international trade networks for Ivory and live animal species are explored and how these markets are sustained and linked with other forms of cross border crimes e.g., money laundering, terrorism, drug trafficking etc. Rationalities of commodification e.g., conservation gains of trophy hunting, infatuations with eastern medicines and alternative medicines, fame and class will be discussed.	L	1 hour, 40 min	Bersaglio, B., & Margulies, J. (2022). Kabiri, N. (2010). Thakholi, L. (2021). Hannis, M. (2016). Ayling, J. (2013).
15	Impacts of tourism on endangered species Endangered species are iconic and attract massive tourism. Students will take a travelling lecture while observing and taking note of various impacts of tourism such as overcrowding, off-road driving, and habituation of wildlife in Maasai Mara Game Reserve. At the end, students will reflect on some of the solutions to these problems. A short debate is allowed where students defend or critique opportunities for ethical tourism in Maasai Mara. Every student is required to give their argument for or a critique on the subject, especially reflecting on possible personal initiatives.	FL	4 hours	Holland, K. K., et al. (2021). Drummond, D. (1995).

No	Title and outline	Туре	Time	Readings
16	The role of community conservation in conserving elephants, lions and cheetah Community conservancy is one of the approaches through which community-based conservation has been implemented in Kenya. This guest lecture will be offered by a leader of Maasai Mara Wildlife Conservancies Association. The lecture will explore the contribution of the conservancy to wildlife conservation and poverty alleviation of the surrounding Maasai community. In addition, the lecture will explore some of the impacts that the conservancy has had to grapple with as result of COVID-19 pandemic, and what that means for the resilience of community-based conservation.	GL	1 hour, 40 min	Oduor, A. M. (2020). Chakrabarti, S., & Ekblom, A. (2023). Gona, J. K., & Atieno, L. (2020).
17	Urban population pressures on the conservation of Rhino, Rothchild Giraffe, and other endangered mammals in Lake Nakuru Rhino Sanctuary In this travelling lecture, students and faculty drive through Lake Nakuru National Park and learn about impacts of expanding urbanization on Rhino and other endangered species. Issues like habitat contamination from improper sewerage management, plastic pollution, habituation, and poaching are discussed and where possible observed.	FL	3 hours	Daniels, R., & Bassett, T. J. (2002). Kariuki, P. N. (2013).
18	Contribution of private conservancies in Rhino conservation. The case of Ol Pajeta conservancy Students, faculty and guests travel through Ol Pajeta Conservancy. A guest working for Ol Pajeta conservancy explains how the conservancy began and the conservation programs it undertakes to conservation of Rhino and other endangered species. The lecture then dwells on why and how private conservancy work best for the conservation of Rhinos in Laikipia ecosystem. Challenges and opportunities are explored. The class will also explore the support from bilateral ad multilateral donors and how they conduct join research and Rhino conservation collaboration with governments.	FL; GL	2 hours, 30 min	Schetter, C., et al. (2022). Sundaresan, S. R., & Riginos, C. (2010).
19	Poaching networks and securitization of rhino conservation In this panel discussion the head of wildlife security at Ol Pajeta Conservancy will discuss with students the nature and scope of security preparedness and operations around Rhino protection, how the poaching networks operate and thwarted. The everyday life of rangers and trauma for frontliners will be examined.	GL; D	1 hour, 40 min	Büscher, B. (2016). Neme, L. (2014). Eustace, M. (2012). Bwalya, E., & Shuping, K. (2020). Herbig, F. J., & Griffiths, M. L. (2016).

No	Title and outline	Туре	Time	Readings
20	Historical development of Chimpanzee rescue Sanctuary in Ol Pajeta In this field lecture the guide take students through the history of Ol Pajeta Chimpanzee rescue sanctuary.	GL	2 hours, 30 min	Ghobrial, L., et al. (2010). Lopresti-Goodman, S. M., et al. (2015).
	Students will learn some of the human -induced abuses facing Chimpanzees, trafficking routes, and countries of origin. Issues of animal welfare and rights will be discussed extensively.			Lopresti-Goodman, S. M., et al. (2012). Sgalitzer, H. A. (2013).
21	Celebrities in conservation – the case of former Hollywood Stars William Holden and Stefanie Powers Celebrities have been used by various multinational environmental organizations to reach out to general public to reduce pressure on the environment, as well as to fundraise for conservation projects. In this lecture we take the example of former Hollywood movie stars William Holden and Stefanie Powers to demonstrate the important role celebrities can play in conservation. After the lecture, students reflect on some of the problems that may be associated with celebrities involvement in conservation, especially of endangered species. More examples are given such as Jackie Chan, Leonardo de Caprio, Usain Bolt, and Kenyan celebrities like former Olympians David Rudisha, Paul Tergat and Kenyan-born Hollywood actress Lupita Nyong'o.	FL; GL	2 hours, 30 min	Duthie, E., et al. (2017). Brockington, D. (2008). Sullivan, S. (2011).
22	Ecofeminism and Environmental Justice Movement in Kenya: The Philosophy of Wangari Maathai Wangari Maathai was, and still is a celebrated Kenyan environmental activist and the first African woman to win Nobel Peace Prize. The class begins with a lecture on the contribution of key women who have contributed to the environmental conservation in Kenya. Attention is paid to Wangari Maathai's philosophy to explore the complexities of natural resource governance in Kenya, including diverse property regimes, conflict resolution, the interlinkages between governance and environmental issues. The students watch a film and engage in a class discussion afterwards. Students are thereafter divided into workgroups. Each work group is given prompts on a conservation problem. They are asked to pitch ideas on how they use Wangari Maathai philosophies to solve the problem. Each workgroup presents their ideas to the class for faculty and peer review.	FL; F; D	2 hours, 30 min	Muthuki, J. (2006). Michaelson, M. (1994). Joseph, R., & Bari, R. (2013).
23	Review of Storytelling Videos and Exam Review Students begin by showing their films to faculty, stakeholders, and peers. The audience comments on the	L	1 hour, 40 min	

No	Title and outline	Туре	Time	Readings
	videos. Thereafter, Faculty shall do an overall review or			
	recap of the course, highlighting main themes and			
	messages, and outline topics that students should put			
	more effort and focus on for the exam. Students will have			
	a chance to seek further clarifications on course topics			
	and as well as administrative matters of the exam.			
	Total		50	

Reading List

*Readings in **Bold** are required

- 1. Akama, J. S. (2007). Controversies surrounding the ban on wildlife hunting in Kenya: An historical perspective. In Tourism and the Consumption of Wildlife (pp. 95-108). Routledge.
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