ACUS SCHOOL OF ORNITHOLOGY

Basic Ornithology Manual for Bird Guides

JANUARY 17, 2025

AVIAN CONSERVATION UGANDA SOCIETY
https://acus.org

Brief Description:
This introductory course is designed for beginners interested in bird guiding. It covers the fundamentals of bird identification, observation techniques, and understanding bird behaviour, providing participants with the skills of bird conservation and advocacy.

Course objectives:

By the end of the course, a learner should be able to:

- Identify common bird species.
- Demonstrate use of field equipment during bird guiding.
- Identify bird habitats and their ecological roles.
- Apply ethical birding practices and contribute to conservation efforts.

Course Duration:

- **Total Contact Hours**: 16 hours
- **Duration**: 4 weeks

Course Outline

Module	Content	Mode of Delivery	Contact Hours (CH)
Week 1			
Bird identification	• Bird morphology; The basic external features of birds, including beak shape, plumage(feathers), leg and foot structure and tail shape. • Physiological, morphology and structural adaptation in birds; adaptations to flight, adaptations to feeding and adaptations to reproduce • Importance of birds	-Presentations - Guided discussions - Field studies -Utilizing online videos on bird morphology	2
Bird evolution and classification	• Introduction to bird evolution: Characteristics that define birds such as feathers, wings and their skeleton, significance of bird evolution in the context of biology, ecology and conservation. • Origins of Birds: Theories including dinosaur-bird relationship, overview of key fossils such as Archaeopteryx that provide evidence for bird evolution and description of the characteristics of the early birds such as teeth, long bony tails and claws on wings. • Taxonomy and classification: -Basic principles of bird taxonomy and classification, -Importance of bird	-Presentations -Guided discussions -Using images, videos and diagrams that demonstrate different bird evolution theories, - Field visits on bird identification and classification.	4

	taxonomy in Birds conservation and research, -Classification of birds into different orders, -General characteristics of selected Avian orders, Major bird families and species in Uganda • Characteristics of birds; -General characteristics of birds that distinguish them from other vertebrates -Reptilian characteristics of modern bird -Major differences between birds and reptiles		
Week 2			
Birding skills and Techniques	• Field guides and identification; use of field guides, binoculars, monoculars, telescopes and other tools to aid in bird identification • Field notebook and recording; understand the importance of keeping field notebook and recording observations • Bird call identification; Recognizing and identify different bird calls	- Field visit to capture, observe, record features/data of the birds in that particular area. -Using the recorded field data such as voice calls, pictures, videos to identify the features of different birds.	2
Bird behavior and distribution	• Habitat and distribution; How different bird species are adapted to specific habitats and how they are distributed across different regions. • Geographical distribution and Important bird areas (IBAs) in Uganda • Diet foraging; different feeding strategies and diets of various bird species • Breeding and nesting; understand the basic principles of bird breeding, nesting and reproduction	-Presentations - Guided discussions -Using images, videos and diagrams that demonstrate bird behavior such as foraging, mating, nesting and reproducing.	2
Week 3			
Bird conservation and Ethics	• Threats to bird populations: understand the major threats to bird populations, including habitat destruction, climate change and human activities. • Conservation efforts; understand the different conservation strategies and initiatives aimed at protecting bird population and habitats. • Birding ethics; the importance of responsible birding practices, including minimising disturbance to birds and habitats. • IUCN status of birds in Uganda	- Presentations -Guided discussions -Group discussions on the major threats to bird populations and conservation strategies for birds -Use video clips/documentaries on bird diversity for guided discussion on important IUCN status of birds in Uganda	2

Bird Migration	• Migration and Movement patterns; different migration patterns and movements of bird species, evolution of migration, types of migration, factors affecting migration, bird navigational techniques and importance of migration to birds.	- watching tutorials of different migration patterns of birds.	2
Week 4			
Field Practical	• Field visits	-Select one site and take participants through series of bird identification and classification.	2

Mode of delivery:

This course shall be delivered through lectures, Tutorials, demonstration, Group discussions, Field trip, and community outreach

Assessment Method:

This course shall be assessed through course work and practical assessment (mainly field activities) examinations. The coursework shall consist of individual assignments which will carry 40% and end of course practical assessment that takes 60 %

Reading List:

1. Terry Stevenson & Fanshawe (2020) 2nd Edition. *Birds of East Africa: Uganda, Kenya, Tanzania, Rwanda, Burundi.*
2. Nature Uganda (2012). *The Uganda Bird Checklist*
3. International Union for Conservation of Nature [IUCN]. (2020). *The IUCN Red List of Threatened Species.* IUCN. https://www. Iucnredlist. Org.
4. Frank B. Gill and Richard O. Prum (2019). *Ornithology: An Evolutionary Approach*
5. Donald S. Farner &James R. King (2019). *Avian Biology*
6. John James Audubon (2007). *Birds of North America: A Guide to Behavior, Habitat, and Nesting Habits*
7. William J. Sutherland, Ian Newton, and Rhys E. Green (2013*). Bird Ecology and Conservation: A Global Perspective*
8. John M. Marzluff and Tony Angell (2017). *Avian Ecology and Conservation*
9. James R. Miller and Richard J. Hobbs (2016). *Bird Conservation: Global and Local Perspectives*
10. Berthold, P. (2001). *Control of bird migration*. Journal of Ornithology, 142(2), 143-153.
11. Catchpole, C. K., & Slater, P. J. B. (2008). *Bird song*: Biological themes and variations.
12. Bibby, C. J., Burgess, N. D., & Hill, D. A. (2000). *Bird census techniques*.