

NJ MORE FIELD GUIDE COLLEGE - SYLLABUS NJ MORE GUIDE & TRAIL EXPERIENCE

1. 6 MONTHS COURSE CONTENT

- FGASA Apprentice Field Guide (NQF2) (Level 1) (detailed syllabus below)
- FGASA Apprentice Trails Guide (Back-up Trails) (detailed syllabus below)
- Rifle competency & Advanced Rifle Handling
- Wilderness First Aid level 1 and 2 (detailed syllabus below)
- Tracks & Signs (detailed syllabus below)
- Birding (ID of birds and sounds)
- Navigation & Orientation (detailed syllabus below)
- 4x4 Driving (detailed syllabus below)
- Principals of Reserve Management & Anti-Poaching
- Wildlife Photography
- Basic Mechanics
- Hospitality in 5-star environment

2. SYLLABUS FGASA APPRENTICE FIELD GUIDE(NQF2) (LEVEL 1)

The Apprentice Field Guide should be able to identify the major living and non-living features of the natural environment in which s/he operates and interpret them at a level based mainly on observation and from an elementary scientific and cultural perspective. As a general guideline, an Apprentice Field Guide must have sound knowledge of the history, geology, plants and animals (i.e. birds, mammals, reptiles, etc) in the specific area of operation.

3. THE FGASA APPRENTICE FIELD GUIDE SYLABUS INCLUDES THE FOLLOWING MODULES:

- Introduction to guiding in the natural environment
- Creating a guided nature experience



- Geology
- Astronomy
- Weather & Climate
- Basic Ecology
- Basic Taxonomy
- Introduction to the Biomes of Southern Africa
- Botany & Grasses
- Arthropods
- Amphibians
- Reptiles
- Fish
- Birds
- Mammals
- Conservation management and Historical Human Habitation

MODULE 1 - INTRODUCTION TO GUIDING IN THE NATURAL ENVIROMENT

On completion of this module you will:

- Have an understanding of what a professional nature guide does and where s/he fits into the tourism guiding industry.
- Know what the aims of nature guiding are.
- Have an understanding of guiding ethics in the natural environment
- Have been introduced to a set of guiding principles and a code of conduct for guides from FGASA and a Dept. of Environment Affairs and Tourism (DEAT) point of view and have an understanding of legal requirements

MODULE 2 - CREATING A GUIDED NATURE EXPERIENCE

- Be able to carry out a pre-briefing before embarking on a guided experience.
- Be aware of determining any medical considerations of your clients.
- Be able to determine if your clients have any special interests before departing on the guided experience.
- Have the ability to involve all of your clients as individuals in the guided experience.
- Take into consideration the environmental factors when it comes to the comfort of your clients.



- Have enhanced communication skills for guiding in the natural environment.
- Be able to carry out research on potentially interesting sights
- Approach animals taking into consideration all the client and animal factors which will affect the approach.
- Be able to orientate yourself during the day and at night making use of a number of methods to do so.
- Know what procedures to follow when lost and have the ability to find water and edible food in the natural environment.
- Be able to interpret all aspects of the natural environment to enhance the experience of your clients.

MODULE 3 - GEOLOGY

On completion of this module you will:

- Know what the meaning of Geology is.
- Have a basic understanding of what the Earth consists of.
- Know how rocks are classified
- Understand how igneous, sedimentary and metamorphic rocks are formed.
- Know what a mineral is and be able to give a few examples.
- Have an understanding and knowledge of a few common rock types.
- Know the weathering properties of some common rock types.
- Have an understanding of the interrelationships between rocks, soil, climate, vegetation and animals.

MODULE 4 - ASTRONOMY

- Be able to understand by definition what is meant by a universe, galaxy and solar system.
- Know the position of the nine planets in the solar system in terms of their distance from the Sun.
- Be able to point out the constellations of Orion, Scorpio and the Southern Cross.
- Be able to determine a southerly direction making use of the Southern Cross.
- Be able to describe the phases of the moon as it is viewed from Earth.
- Know what is meant by an eclipse and how to differentiate between a lunar and a solar



eclipse in terms of the positioning of the Sun, Earth and Moon.

• Know how the ocean tides are affected by the moon.

MODULE 5 - WEATHER AND CLIMATE

On completion of this module you will:

- Know the difference between weather and climate
- Understand the process of cloud formation.
- Know the different types and names of clouds and what weather conditions are associated with these different cloud types and how this may affect the guiding experience.
- Know the different types of local wind conditions that may apply to the area of guiding operation.
- Be able to describe the four major influences on the South African climate.
- Understand the general Summer and Winter conditions of Southern Africa.

MODULE 6 - BASIC ECOLOGY

On completion of this module you will:

- Know what Ecology is and how important an understanding of ecology is for the nature guide.
- Have an understanding of the major components of ecosystems.
- Be able to explain the different levels of organisation in ecology.
- Know what trophic pyramids, food chains and food webs are and how to give an explanation of these.
- Be able to give an explanation of the nutrient cycle.
- Be able to give an explanation and examples of symbiotic relationships.
- Know what predation is and the various types of competition that occurs in the natural enviranment.

MODULE 7 - BASIC TAXONOMY

On completion of this module you will:

• Know what the meaning of taxonomy is.



- Have an understanding of why and how living organisms are classified.
- Be able to name the six kingdoms of living organisms.
- Be able to place living organisms into the hierarchical order of classification.

MODULE 8 - INTRODUCTION TO THE BIOMES OF SOUTHERN AFRICA

On completion of this module you will:

- Know what a biome is.
- Be able to name the seven major biomes in Southern Africa.
- Be able to explain the biomes in terms of the amount of seasonal rainfall and temperature.
- Know what the main indicator species are for each of the biomes in terms of animals and dominant vegetation types.

MODULE 9 - BOTANY AND GRASSES

On completion of this module you will:

- Know the anatomy of a tree.
- Know how to identify a tree and thus be able to apply this knowledge to identify any tree in Southern Africa.
- Be able to give some interesting facts about trees in terms of general uses, medicinal uses and traditional beliefs associated with specific trees.
- Know the anatomy of a grass plant.
- Know how to identify a grass plant and thus be able to apply this knowledge to identify any grass plant in Southern Africa.
- Know the differences between sweet and sour veld.
- Be able to explain grassland succession.
- Understand what is meant by the ecological status and the grazing value of grasses.

MODULE 10 ARTHROPODS (INSECTS AND RELATIVES)

On completion of this module you will:

• Know what an arthropod is.



- Know what the characteristics of insects are.
- Be able to explain the three different types of insect life-cycles and give examples of each.
- Understand why insects are so successful and the ecological importance of insects.
- Have a basic understanding of insect flight and their feeding behaviour.
- Be able to identify common insect orders.
- Be able to explain the difference between insects and spiders.
- Know what the characteristics of the Arachnida are and be able to place spiders into two main sub-orders.
- Know how to recognise the venomous spiders in South Africa which are of medical importance to human beings and know what type of venom they have.
- Know what the characteristics of scorpions are and how to distinguish between the two main types of scorpions.
- Know what the differences are between Millipedes and Centipedes and their particular feeding behaviour.

MODULE 11 - AMPHIBIANS (FROGS AND TOADS)

On completion of this module you will:

- Know the characteristics of the class of amphibians and be able to explain the differences between frogs and toads and their calls
- Understand the life cycle of frogs and toads and be able to explain metamorphosis.
- Be able to explain mating postures, nests and types of eggs of frogs and toads.

MODULE 12 - REPTILES

- Know the characteristics of the class of reptiles.
- Be able to identify the features of the three reptile orders.
- Be able to identify the features of Turtles, Tortoises and Terrapins.
- Be able to identify the features of skinks, lizards, agamas, geckos, chameleons, monitors and snakes.
- Know how to identify the more common species of snakes as well as the potentially lethal families and species of snakes.
- Be able to name the different types of snake venom, symptoms and effects.



- Be able to classify snakes in terms of the different teeth structures.
- Know the different types of reproduction in snakes.
- Have a basic understanding of the senses of snakes.
- Know some interesting facts about reptiles.

MODULE 13 - FISH

On completion of this module you will:

- Know what a fish is.
- Be able to label the external anatomy of a fish.
- Understand the ecological importance of fish.
- Be able to explain how fish reproduce and grow.
- Know the different types of fish feeding behaviour.
- Understand how fish move through water.
- Be able to explain the concepts of neutral buoyancy and the swim bladder.
- Know how the lateral line system works in fish and why it is important.
- Be able to identify common species of fish.

MODULE 14 - BIRDS

On completion of this module you will:

- Know the characteristics of the class of birds.
- Understand the difference between passerines and non-passerines.
- Be able to give explanations of the various feeding methods and type of food that birds eat.
- Be able to point out examples of prominent bird species nests.
- Be able to give a basic explanation of commonly displayed bird behaviour.
- Know how to identify birds making use of the various identification pointers.
- Be able to identify the prominent and common bird species.

MODULE 15 - MAMMALS



On completion of this module you will:

- Know the characteristics of the class of mammals.
- Know the characteristics of the sub-classes of mammals.
- Be able to explain the foot structure and digestive systems of ruminants and hindgut fermenters.
- Be able to give the basic physical characteristics, social and feeding habits, habitat and distribution of the common species of mammals.
- Be able to differentiate between males and females of common mammal species.
- Have basic behavioural knowledge of the main indicator species ("Flagship")

MODULE 16 - ANIMAL BEHAVIOUR

On completion of this module you will:

- Know what animal behaviour is.
- Understand the different grouping behaviour of animals.
- Be able to explain the different forms of animals' communication making use of relevant examples.
- Have an understanding of various types of animal protective behaviour.
- Be able to explain the differences between animal home-ranges and territories.
- Be able to identify and interpret animal signs and sounds.

MODULE 17 - CONSERVATION MANAGEMENT AND HISTORICAL HUMAN INHABITANTS

- Know what conservation practices are used in the natural environment.
- Understand why and how these conservation practices are carried out.
- Know what a Transfrontier/ Peace Park is and be able to give some examples.
- Know what a Biosphere Reserve is, why they are established and be able to give some examples of working Biosphere reserves.
- Have knowledge and an understanding of the early human inhabitants of Southern Africa.
- Be able to explain the three Stone Age periods that took place in Southern Africa and some of the more interesting Stone age sites and their significance.



- Be able to explain the characteristics of the Iron Age sites in Southern Africa and their significance.
- Have an understanding of the distribution of traditional Southern African cultures.

This module 17 will cover the absolute basics in terms of the topics included, and is thus only a very brief introduction to conservation management and Historical Human Habitation of Southern Africa.

- a) The conservation management section of this module will include the following:
- The use of fire as a management tool
- Bush encroachment and alien plant control
- Erosion control
- Road maintenance
- Animal population control
- Water provision and water-hole rotation
- b) The Historical Human Habitation section of this module will include the following:
- A brief history of humans in Southern Africa
- The Early Stone Age
- The Middle Stone Age
- The Later Stone Age
- The Iron Age
- The distribution of Traditional Southern African cultures based on language

4. SYLLABUS-FGASA APPRENTICE TRAILS GUIDE

A FGASA Apprentice Trails Guide (Back-up trails Guide) is an individual who is in training (in an apprentice program) to become a Trails Guide and will learn how to function as 2nd Rifle and later as 1st Rifle during the training phase. The apprentice program is a stepping stone in the process for a guide to attain a FGASA Trails Guide qualification and is not yet qualified to conduct trails or walks in areas with dangerous game in absence of a FGASA Trails Guide (NQF4), Professional Trails Guide, or SKS (DG) Guide



MODULE 1 - APPROACHING ANIMALS ON FOOT

- Rules for walking in the bush clients informed about procedures before departing on walks
- Approaching dangerous game Guidelines when dealing with dangerous game
- Comfort zones and personal space
- Responses to charging animals
- Client restrictions on walks
- Guest checks before a walk
- Guest briefing before walks
- Approaching dangerous game
- Areas to walk through carefully or avoid walking through altogether

MODULE 2 - WAEPON HANDLING

- Rifile requirements
- Additional Firearms
- Rifle loading
- State of readiness
- Rifile operation in dangerous situations
- Carring a ifle
- The function and position of the armed backup or tracker
- Rifles along on game drives
- Rules and safe handling of fire arms
- Mechanics of the bolt action rifle
- Rifle balistics
- Cleaning and Maintenance

MODULE 3 - DANGEROUS ANIMAL KNOWLEDGE

• General information of white aand black rhinocerous, lion, leopard, buffalo, elephant and hippo

MODULE 4 - SECTIONS OF FIREARM CONTROL ACT

• (Act 60 of 2000) relevant to nature guides

5. SYLLABUS ANIMAL TRACKS AND TRACKING



- Track & sign interpretation
- The basics of Trailing
- Gaits
- Track & Sign interpretation and evaluation by Cyber-Tracker

6. SYLLABUS NAVIGATION AND ORIENTATION

- Compass and maps
- Global positioning system
- Celestial indicators
- Natural phenomena

7. SYLLABUS 4X4DRIVING

- General safety
- When to use high- and low-range
- Differentials, hubs and traction control
- Tyre pressure
- Descents/Ascents
- Driving on or through Sand, Grass, Mud, Rocks, Water