



JAI NARAIN VYAS UNIVERSITY, JODHPUR

SYLLABUS

**DIPLOMA COURSE
ON
WILDLIFE ECOTOURISM**

(As Per National Education Policy, 2020)

Year 2023-24

**Wildlife Research and Conservation Awareness Centre
Faculty of Science, J N Vyas University, Jodhpur (Raj.)**

**WILDLIFE RESEARCH AND CONSERVATION
AWARENESS CENTRE, J. N. V. U Jodhpur**

PG DIPLOMA COURSE ON WILDLIFE ECOTOURISM

Ecotourism is combination of Ecology, Wildlife and Tourism. It promotes me an important economic activity in and around the Jodhpur district of Rajasthan. Ecotourism provides opportunities for visitors to experience powerful manifestations of nature as well as culture and to learn about the importance of biodiversity conservation and local cultures. At the same time, it generates income for communities living in rural and remote areas. With the increasing popularity of Wildlife Biology, Eco-tourism and allied fields like wildlife and adventure (sport) based tourism, the existing travel agencies, resorts and chains of hotels find it difficult to satisfy the needs of tourist for information, assistance and guidance. Hon'ble Supreme Court of India directed to introduce environmental science courses in school, colleges and universities. Thus, with increasing demands of environmental education, schools, colleges, government and private bodies (Corporates) are augmenting their interest in conservation activities. Sometimes they even invest crores of rupees in ameliorative programmes under Corporate Social Responsibility strategies. But ecotourism and conservation areas have a great deficiency of qualified personnel, who can guide, lead or organize tours and other programmes into the realm of nature. Certainly, this course intends to develop qualified professionals with skills, information and know-how of eco-tourism and conservation so as to step into high-end jobs or become entrepreneurs.

Purpose: The course in wildlife ecotourism, is to foster and appreciate nature culture by promoting conservation, supporting sustainable community development, negative impacts. Assessment and providing the active and beneficial involvement of local communities. Ecotourism enables communities to thrive economically while preserving and restoring the natural resources on which the travel and tourism industry and local communities depend. This program aims to strengthen the professional and train the local people for their livelihood through skill development program.



Course Objectives

- To produce qualified students who can get job in the area related to biodiversity, conservation and tourism
- To provide and develop skilled manpower in the field of wildlife ecotourism
- To develop ability to discuss the importance of the local ecology, wildlife, culture, community development, community-based ecotourism concept as well as current trend in wildlife ecotourism
- To equip students with practical skills in wildlife Tour Guiding and ecotourism
- To create awareness about Nature Conservation among people



DCC WET 8001T BIODIVERSITY CONSERVATION Credit: 03 Duration: 45 hrs

Unit 1

Biodiversity definition and its Types, Biogeographic Zones of India and its faunal diversity

Unit 2

In-situ and Ex-situ conservation, PAs of India – National Park, Wildlife Sanctuary, Zoo and Biological park etc.

Unit 3

Wildlife study Tools- field notes & datasheets, Toposheets, Field cameras, Range finder, binoculars, camera traps, field compass, Wildlife study methods - Point count method

Unit 4

Administrative set up of Forest Department, Forest Act, 1927 & Forest (Conservation) Act, 1980, Wildlife Protection (Act 1972) & amendments,

Unit 5

Wildlife organizations: Wildlife Institute of India, WCCB, IUCN, CITES

DCC: WET 8002T ECOTOURISM Credit: 03 Duration: 45 hrs

Unit – 1

Concept of tourism: Relationship between ecology and tourism, Controlled and uncontrolled tourism, Threats of uncontrolled tourism on wildlife

Unit – 2

Different concepts of ecotourism: ecotour, eco-destination. Role of ecotourism in conservation, Eco-development, Eco-tourism spots of Rajasthan

Unit – 3

Cultural heritage of Rajasthan, Architecture of fort, religious sites of Rajasthan, Wildlife-Tourism and conservation related issues

Unit – 4

Dos & Don'ts in field visit with tourist, Field safety of tourists, Wildlife NGOs WWF, WPSI, BNHS and Traffic

Unit – 5

Rajasthan Tourism Policy-2020, Role of ecotourism in UNDP, Ministry of Tourism GOI and Govt. of Rajasthan

DCC: WET8001P- PRACTICAL Credit: 04 Duration: 120 hrs

1. Identification of Birds species and prepare a checklist of birds of given area
2. Identification of flora and fauna of Thar Desert/Aravalli ecosystem
3. Activities involves in ecotourism: Hiking, mountain climbing, eco-cycling,
4. Detail and Use of equipment: Handling of GPS, Camera, Compass and Range finder



DSE WET8101T-: NATURAL RESOURCES

Credit:03

Duration:45 hrs

Unit 1

Natural resources-Definition and its type, Biotic and Abiotic, Renewable-Non-renewable, Recyclable and Nonrecyclable

Unit 2

Forest Resources, Deforestation, Forest fire, Jhum cultivation

Unit 3

Water resource, Water budget of world, rain cycle, water conservation

Unit 4

Land and mineral resources-Minerals, Fossil fuel soil erosion & Desertification

Unit 5

Food and energy resource: Fertilizer, pesticides and its impact, solar and wind resources

DSE: WET8101T: PRACTICAL (WET8101T)

Credit: 2

Duration:60 hrs

1. Use of pesticides and precautionary measures
2. Study of different spraying and dusting techniques
3. Identification and comments upon different NTFP
4. Identification and comments upon different minerals and fossils
5. Traditional water conservation techniques in Rajasthan



DSE: WET8102T- BASIC WILDLIFE**Credit: 03****Duration:45 hrs**

Unit 1

Direct and indirect signs of wild animals, Age and sex determination in mammals

Unit 2

Human wildlife conflict and its management, Wildlife crime & trade

Unit 3

Rescue and rehabilitation of wild animals, Animal behaviour during rescue operation

Unit 4

Herpetology: poisonous and non-poisonous snake, Ornithology

Unit 5

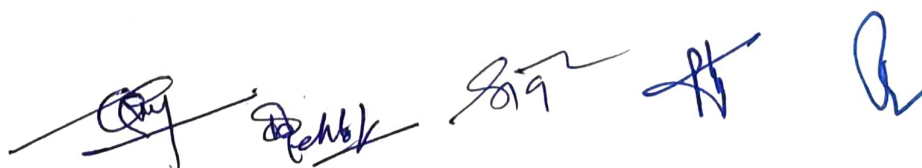
Types of habitats, Habitat management in protected areas

DSE: WET8102P- PRACTICAL BASIC WILDLIFE**Credit:02****Duration:60 hrs**

1. Develop skill to draw various pugmarks of wild animals
2. Identification of direct and indirect signs of wild animals
3. Age and sex determination in mammals
4. Identification of snakes
5. Bird Watching: Identification of Birds, Calls and songs.

DPR***FIELD STUDY****Credit: 5****Duration: 150 hours**

Orientation tour for observations of wildlife signs and evidences of wild species and detail studies on animal ecology and vegetation in their habitat.

PROJECT WORK**Credit: 5****Duration: 150 hours****SEMINAR****Credit: 2****Duration: 60 hours**

DCC WET8003T: CONSERVATION BIOLOGY**Credit:03 Duration: 45 hrs**

Unit 1

Biodiversity of Major Biogeographical Zones, Major Biomes of India and its wildlife diversity, Threats to Biodiversity

Unit 2

Project Tiger, Project Elephant, Project Bustard, NTCA

Unit -3

Tool and Technique - GPS, Pugmark and transect methods, Software like Google earth and Microsoft excel

Unit – 4

Biodiversity Act (2000), National Zoo Policy, CZA, People's Biodiversity Register

Unit 5

Pollution: definition, source and types, Air, water, noise and thermal pollution

DCC WET8004T: HERITAGE CONSERVATION**Credit:03 Duration:45 hrs**

Unit 1

Concept of heritage conservation & Its importance, types of Heritage sites: Socio-cultural, Archaeological, Natural, Geo-Heritage, Monuments, Museum

Unit 2

Famous fairs & temple of Rajasthan: Desert festival, Pushkar & Tilwada cattle fair
Temples: Ramdevra, Brahma temple of Pushkar & Khwaja Gharib Nawaj Dargah Sharif of Ajmer

Unit 3

UNESCO world heritage sites of India: Taj mahal, Keoladev National Park, Ajanta and Ellora cave

Unit 4

Archaeological Survey of India, Famous forts: Mehrangarh, Kumbhalgarh, Sonar etc.

Unit 5

Traditional culture of Rajasthan: cloths, foods, folklore, music & instruments

WET8002P: Practical**Credit:04****Duration:120 hrs**

1. Identify and comments upon the tools and techniques of wildlife study
2. Identify and comments upon the Traditional culture of Rajasthan
3. Identify and comments upon the historical and cultural heritage of Rajasthan
4. Identify and comments upon the famous fairs & temple of Rajasthan
5. Visits to nearby Biological Park / Zoo / Museum / Fort or any other relevant site.

DSE:WET8103T: Fundamental Ecology

Credit:03

Duration:45hrs

Unit - 1

Ecosystem ecology: structure, functions- energy flow terrestrial and aquatic ecosystem.

Unit - 2

Community ecology: Concept of community, its nature, structure, edges and ecotones - Succession

Unit - 3

Habitat Ecology: Ecology of major habitats - Desert, Grassland, forest, mountain, polar region and aquatic habitat.

Unit - 4

Population ecology: Characteristics of a population, Species Interactions

Unit - 5

Applied Ecology: Aquaculture, Vermicomposting, Apiculture

DSE:WET8103P: Practical

Credit:02

Duration:60 hrs

1. Identification of flora on a given ecosystem
2. Identification of fauna on a given ecosystem
3. Ecosystem study: Aquarium
4. Identification of instrument relating to habitat and wildlife study
5. Study on any nest habitat



DSE WET8104T: DESERT ECOLOGY**Credit: 03****Duration:45 hrs****Unit 1**

Brief of Thar Desert, wild fauna of thar desert, Conservational issues for desert biodiversity

Unit 2

Characteristics of Desert Ecosystem, Adaptation in desert animals and plants

Unit 3

Community forest: Sacred groves and Orans of Rajasthan, Conservation Reserves of Rajasthan

Unit 4

Major desert plants, Economic and medicinal value of desert plants

Unit 5

Role of community for wildlife conservation, Local community: Bishnoi, tribal communities Bheel, Kalbelia and Garasia

DSE: WET8104P: Practical**Credit:02****Duration: 60 hrs**

1. Identify and comments upon plants
2. Identify and comments upon the wild animals
3. Assessment of biodiversity of Sacred groves or Orans or Community reserve
4. Visit of the temple of God of local communities
5. Report of visit of Nursery

DSE***INTERNSHIP / DISSERTATION****Credit: 5****Duration: 225 hours**

The students will undertake the internship work on the assigned topic on various issues, problems, themes, case studies, tourism organization study at historical or cultural heritage or ecotourism destination.

ON JOB EXPERIENCE**Credit: 5****Duration: 270 hours****COMMUNITY ENGAGEMENT EXPERIENCE****Credit: 4****Duration: 225 hours****RESEARCH CREDIT COURSE****Credit: 4****Duration: 180 hours****SEMINAR****Credit: 2****Duration: 60 hours**

In view of the course content will be as follows:

Three theory lectures per day= 2: 0: 0

One practical per day = 0: 0: 1

Eligibility: Graduates of any discipline

Total seats: 25

Minimum number of candidates required for start of course: 10

Financial matter

Admission fee: Rs 10000/- per student + University fee and Tour or field visit charges extra

Income from fee = Rs 10000 X 25 = Rs 2,50,000 /-

Expenditure

One skilled person @ Rs 6500 for 10 months = Rs 65000/-

Contingency and consumable= Rs 25,000 /-

Lectures @500 rupees = Rs 1,40,000 /-

Books:Rs 20000/-

Resource persons for the course

Faculty member from the department of Zoology/Botany/ Geology/Geography of J N V University Jodhpur and resource person or subject experts from other department or institute / organization of the country

CBCS System (As per NEP-2020): Total duration of the course is 12 months and will be divided into two semesters. The duration of each semester will be 6 months. The exam will be conducted on semester basis.

Course Description: The detail of course structure is enclosed separately.

DCC paper – Four (Compulsory)

DSE paper – Four (Out of four students have to choose one paper in each semester along with DPR for one semester and IOJ/CEE/RCC/SEM for second semester or can choose two DSE in each semester

Exam Scheme: As per NEP-2020 and University guidelines

Theory Exam: As per NEP-2020 and University guidelines

Practical Exam: As per NEP-2020 and University guidelines

Distribution of marking scheme: As per NEP-2020 and University guidelines

Attendance: As per NEP-2020 and University guidelines

Abbreviations:

NHEQF- National Higher Education Qualification Frame work Level,

DCC- Discipline Centric Core Course, DSE-Discipline Specific Elective Course

Suggested Reading Materials (Books)

- Environmental Studies: Dr Rajendra Singh
- Desert Ecology: Ishwar Prakash
- Animal Behaviour: Reena Mathur
- Faunal Diversity of Thar Desert Gaps in Research: Ghosh, Baqri and Prakash
- The Wildlife Protection Act: TRAFFIC
- Snakes of India The Field Guide: R Whitaker & Ashok Captain
- Field Guide to Birds of India: B Grewal, S Sen, S Singh, N Devasar, G Bhatia
- Prater: Indian mammals
- Vivek Menon: Indian mammals A Field Guide
- Monitoring Tigers, Co Predators Prey and Their Habitat: Project Directorate & Wildlife Institute of India
- David fennel, 2008. Ecotourism. 3rd edition. Routledge, Taylor and Francis Group Publication.
- Stephen Wearing and John Neil, 1999. Ecotourism: Impact, potential and possibilities. Butterworth-Heinemann, Oxford Publication.
- Fernando Ramirez and Josefina Santana, 2019. Environmental education and ecotourism. Springer.

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