

Certificate Course in Wildlife Conservation and Management



Course coordinators:
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Course Director:
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Name of the course: Certificate Course in Wildlife Conservation and Management

Duration: 30 Hours

Mode: Blended (Classroom + Fieldwork+ Report)

Target Audience: Undergraduate students, Post Graduates students Forest Guards, Eco-volunteers, NGO workers, Nature enthusiasts

Course Objectives:

1. To provide fundamental knowledge of wildlife conservation principles and management practices.
2. To train students in field techniques such as tracking, surveying, and habitat assessment.
3. To demonstrate the role and application of modern technology in wildlife conservation.
4. To present real-world case studies highlighting successful conservation initiatives.
5. To create awareness about the wildlife reserves and biodiversity of Jharkhand.

Learning Outcomes:

By the end of the course, participants will be able to:

1. Understand key concepts and challenges in wildlife conservation and management.
2. Apply field techniques for monitoring wildlife and habitats.
3. Use basic technological tools (GPS, GIS, camera traps) for conservation tasks.
4. Analyze real-world conservation case studies and draw actionable insights.
5. Identify and describe the biodiversity and conservation status of Jharkhand's protected areas.
6. Engage in wildlife conservation efforts through informed action and community involvement.

Course Structure and Modules:

Module No.	Module Title	Hours	Mode
1	Introduction to Wildlife Conservation	4	Classroom
2	Protected Areas of Jharkhand and Wildlife legislation	4	Classroom
3	Field Techniques in Wildlife Monitoring	8	Field-based
4	Technology in Wildlife Conservation	4	Practical/ Field
5	Wildlife management: Case Studies	4	Classroom
6	Capstone Field Project / Report Writing	6	Field + Evaluation



Detailed Module Description:

Module 1: Introduction to Wildlife Conservation

- Definition and importance of wildlife conservation
- Threats to wildlife: habitat loss, Invasive species, poaching.
- Concepts of in-situ and ex-situ conservation

Module 2: Protected Areas of Jharkhand and wildlife legislation

- Overview of Protected areas: Wildlife sanctuaries, National parks in Jharkhand and wildlife corridors
- Role of forest departments, NGOs, and local communities
- Wildlife act of 1972 and its recent amendments.

Module 3: Field Techniques in Wildlife Monitoring (Field-based)

- Animal census and population estimation methods
- Camera trapping, transect walks, and pugmark identification
- Vegetation sampling, habitat assessment
- Bird watching and acoustic monitoring
- Captive breeding techniques

Module 4: Technology in Wildlife Conservation (Practical/ Field-based)

- Use of Technology: Role of GIS and GPS in wildlife monitoring
- Drones and thermal cameras in anti-poaching and tracking (e.g., MSTRIPES)
- Mobile apps and software tools (e.g., SMART, eBird, CyberTracker)

Module 5: Wildlife management: Case Studies

- Project elephant and Jharkhand, Project Cheetah, Project Tiger, Project Vulture.
- Tiger Reserve success stories: Sariska and Ranthambore, Palamu Tiger Reserve – challenges and prospects
- Human-wildlife conflict mitigation in Jharkhand
- Community-based conservation: Role of local tribes

Module 6: Capstone Field Project

- Conducting a mini field survey in a local protected area
- Preparing a field report with findings, analysis, and conservation recommendations
- Concept of ecotourism
- Group presentations and evaluation



Assessment & Certification:

- Attendance (minimum 80%)
- Field project report and presentation (40%)
- Final assessment (60%) – written + practical
- Certificate awarded upon successful completion

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