English translation of the course contents and programme

Working English translation of the course contents and programme
Course title: *Conservation Biology: the science to protect life on the Planet*

This online course, offered by **WWF Italy – One Planet School**, is structured into **9 modules** with a total duration of **9 hours**. Its aim is to provide a scientifically grounded yet accessible introduction to biodiversity, the current ecological crisis, and the principles, methods and applications of conservation biology. The course also connects biological knowledge with legal, social, communicative and management-related dimensions of conservation practice.

Course overview

The course addresses the loss of biodiversity and the need to reverse current trends of ecosystem degradation through an interdisciplinary approach. It explains how conservation biology documents the diversity of living organisms and ecosystems, investigates the impacts of human activities, and develops methods and techniques to prevent extinction, protect species and habitats, and restore ecological communities and ecosystems.

Indicative programme / main topics covered

1. What is Biodiversity
This section introduces the concept of biodiversity, how its meaning has evolved over time, and why it is essential for understanding and protecting life on Earth. Publicly visible lessons include: **What we mean by biodiversity**, **How many species do we know?**, **The health of ecosystems**, and **Protecting biodiversity**.

2. The State of Biodiversity
This module examines the global condition of biodiversity through scientific data and international frameworks, focusing on knowledge gaps, extinction processes, and anthropogenic impacts on ecosystems and species.

3. Ecosystem structure, value and biodiversity degradation
The course then explores biodiversity as a network of ecological relationships that sustains life on the planet, highlighting how rich and complex ecosystems tend to be more stable, productive and resilient. It also addresses the progressive degradation of terrestrial and marine ecosystems, the idea of **natural capital**, the economic valuation of ecosystems, and the limits of purely economic approaches to nature. Relevant publicly visible lessons include **Structure and value of ecosystems**, **The impact of biodiversity degradation**, **Natural capital and environmental economics**, and **Beyond economic values**.

4. Foundations of Conservation Biology
Another part of the course focuses on the conceptual bases of conservation biology: its origins, its development as an action-oriented and interdisciplinary field, its core principles, and the tension between scientific neutrality and public engagement. Publicly visible lessons include **Foundations of Conservation Biology**, **Origins of Conservation Biology**, **Principles and crisis of Conservation Biology**, and **The science–policy dualism**.

5. Conservation strategies and protected-area management
The programme also presents practical conservation approaches, including conservation strategies, active management of natural resources, community involvement, protected-area planning, and project-based conservation methods. It additionally addresses **in situ** and **ex situ** conservation. Publicly visible lessons include **Conservation strategies**, **Towards active management of natural resources**, **Involving local communities**, **The VMR logic (value–threat–response)**, **Planning and management of protected natural areas**, **Protected-area conservation**, and **In situ and ex situ conservation**.

6. Sustainable resource management
One module is explicitly devoted to **Sustainable Resource Management** and integrates ecological and socio-economic perspectives on ecosystem stewardship. According to the public lesson page, it addresses **planetary boundaries**, **the impacts of the food system**, and **the conservation of forest biodiversity**. Publicly visible lessons linked to this area include **The forest system** and **Threats to forest biodiversity**.

7. Law, environmental governance, narratives of nature, and social change
The course also expands into the legal and cultural dimensions of conservation. Publicly visible lessons show that it addresses the relationship between conservation biology and law, the sources and functions of environmental law, future legal perspectives, ideas about nature, and the need to implement large-scale change. Lessons include **Law and Conservation Biology**, **The function and sources of law**, **Environmental law**, **Perspectives on environmental law**, **The invention of Nature**, and **Putting a major change into practice**.

8. Communicating biodiversity
This module, explicitly titled **Communicating biodiversity**, focuses on strategies and techniques for educating and engaging the public on nature conservation issues. It examines communication processes and practices of scientific outreach. Publicly visible lessons include **Communicating Conservation Biology** and **The message**.

9. Conservation genetics
The final module is explicitly titled **Conservation genetics**. It introduces the role of genetic variability in biodiversity protection and presents case studies and genomic approaches that can support effective conservation strategies. Publicly visible lessons include **The opportunities of Conservation Genetics**, **Applications**, **Genetics in support of protected areas**, and **Genomics applied to biodiversity conservation**.

Additional information

The course page indicates that learners who register on the platform can track their progress and obtain a **certificate of attendance**.