

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI

भारतीय प्रौद्योगिकी संस्थान तिरुपति

1.	Title of the course	Biodiversity Conservation and Sustainability
2.	Course number	HS504L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To HS5024/21
6.	To be offered by	Department of Humanities and Social Sciences
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): To explore threats, conservation solutions, and societal challenges linked to sustainability. To analyze solutions and the connection with society and values. To provide real world examples from the Indian scenario.	
10.	Course Content: Biodiversity and threats to biodiversity, extinction processes, conservation values and ethics, India's conservation history; Concepts and solutions: habitat degradation and loss, habitat fragmentation, species invasions, wildlife harvest, designing and managing protected areas, species and landscape approaches, restoration and re-wilding; Climate change biology: the climate system and climate change, evolution, drivers and pace; Impacts of human-induced climate change on species range shifts, phenology, ecosystem functioning, extinction; Modelling future responses; Societal challenges: environmental economics and sustainable development; Integration of science and policy; Applications will be discussed via mini projects and field immersion.	
11.	Textbook(s): 1. Rosenblum E R, Global Change Biology: The Study of Life on a Rapidly Changing Planet, 1st Edition, Oxford University Press (2021).	
12.	Reference(s): 1. Milner-Gulland E J and Rowcliffe J M, Conservation and Sustainable Use: A Handbook of Techniques, 1st Edition, Oxford University Press (2008).	