Conservation Biogeography

Biogeographie und Naturschutz

Bachelor – Summer Term (Sommersemester)

The course will be given in English

Module 7, 10 or 11	**Conservation Biogeography** *Biogeographie und Naturschutz*	Study Points (SP) 10

This module seeks to provide an introduction to conservation biogeography and the role of science in the effective safeguarding of the Earth's remaining flora and fauna. Student get acquainted with the scientific basis of nature conservation, including motivations for the conservation of nature, history of biodiversity conservation, threats to biodiversity (e.g., habitat loss and fragmentation, invasive species, pollution and climate change), approaches for protecting nature and conservation planning. Course participants will learn critically read, reflect on, and summarize primary literature, as well as train presentation skills. Students will learn computer-based tools to answer questions related to analyzing threats to species and communities and to guide conservation planning.

Prerequisites: Modules M3 (Statistics) and M6 (GIS)

Type	**SWS**	**Workload (SP)**	**Topics**
Lecture	2	90 hours (3 SP) 25 hours in the classroom, 65 hours preparation, exercises and readings	Introduction to conservation biogeography, including the following topics: - What makes species go extinct? - Motivations for conserving biodiversity - Systematic conservation planning - Protected areas and conservation in human dominated landscapes - Population dynamics and conservation genetics - Threats to biodiversity (habitat loss & fragmentation, overharvesting, pollution, invasive species, trophic cascades, climate change, and synergistic effects) - Conservation policy and implementation of conservation measures
Seminar	2	150 hours (5 SP) 25 hours in the classroom, 125 hours preparation, exercises and readings	Deepening of lecture topics via reading current literature, critical thinking, and debating 'hot topics' in conservation. Practical exercises will include: - Setting conservation goals - deciding where and what to protect - reserve design, - species population modeling, - trade-offs related to agricultural production goals and biodiversity, - quantifying habitat loss and fragmentation effects.
TEX		30 hours (1 SP) 8 hour excursion, 22 hours preparation, readings, report	1 Excursion (e.g., to a protected area outside of Berlin)
Final exam		30 hours (1 SP)	Exam, 90 min (1 SP) or Project report (5 pages ~ 8.000 - 10.000 characters without appendices) (1 SP)
Duration		☒ 1 term	☐ 2 terms

Start	☐ Winter term or ☒ Summer term