

## Biocultural Diversity

Code: 43058  
ECTS Credits: 6

**2025/2026**

Degree	Type	Year
Interdisciplinary Studies in Environmental, Economic and Social Sustainability	OT	0

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## Teachers

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Jocelyne Shimin Sze

## Teaching groups languages

You can view this information at the [end](#) of this document.

## Prerequisites

Students are expected to show interest in the intersections between biological and cultural diversity, and the social dimensions of conservation science, policy and practice. The course will build upon key concepts from different scholarly traditions, such as critical geography, political ecology, cultural anthropology, ethnobiology, and ecological economics. Some general background knowledge of scientific literature in these fields would be very beneficial, although it is not strictly required. Some basic knowledge of conservation science would be recommended (e.g., general notions of conservation history, community-based conservation), given that the social and ecological outcomes of different conservation approaches will be critically examined during the course. English language proficiency (both read and spoken) is required for this course.

## Objectives and Contextualisation

The term "biocultural diversity" refers to the spatial overlap and interlinkages between biological and cultural diversity. There is growing evidence that some of the most ecologically undisturbed landscapes in our planet overlap with areas owned, inhabited and/or managed by Indigenous Peoples and local communities. Moreover, evidence is also growing that this overlap is by no means random, and it can be explained through the deeply intertwined relations between biological diversity and cultural diversity. As such, there is well-established evidence that losses of biological, cultural, and linguistic diversity are inextricably linked and driven by the same pressures.

In this course, we will explore biocultural diversity, what it is, why it is important and what factors can result in its erosion and maintenance. We also cover how it can be maintained and how biocultural approaches are being adopted in research and in policy. The course is divided in sessions with different topics related to

current biocultural scholarship. Most lectures will combine theory with practical applications and the use of audiovisual materials to illustrate the complex intersections between biological and cultural diversity. We will also present real-world case studies from ongoing research to exemplify the different challenges of doing field-based research with a biocultural lens. We will use debates, ethical dilemmas and environmental dispute resolution exercises to highlight how biocultural approaches to conservation often imply finding compromises between conflicting goals, views and values.

At the methodological level, we will provide a general introduction to different field-based research methods in ethnobiology and related disciplines, and the biodiversity databases and maps that are used for research on biocultural diversity. We will also work on writing for impact and consider different audiences and objectives, as well as the appropriate tools for achieving the impact we want.

## Competences

- Analyse how the Earth functions on a global scale in order to understand and interpret environmental changes on the global and local scales.
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Work in an international, multidisciplinary context.

## Learning Outcomes

1. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
2. "Describe the concepts related to the idea of ""biocultural diversity. "
3. Express ideas and opinions on a complex topic (regarding (relationships of human groups and protection of biodiversity).
4. Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
5. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
6. Work in an international, multidisciplinary context.
7. Work with different case studies on the concept of biocultural diversity.

## Content

The term 'biocultural' is often used as a qualifier in a broad spectrum of contexts and endeavors, particularly in the fields of cultural heritage and ecosystem management. 'Biocultural relations', 'biocultural indicators', or 'biocultural assets' are just a handful of examples of the wide array of etymological and epistemic manifestations that are often brought together under the umbrella concept of 'biocultural diversity', often described as the total variety exhibited by the world's inter-related natural and cultural systems. Although the meaning of the term 'biocultural' is still open to scrutiny, and subject to interpretation, it essentially entails recognizing the symbiotic and mutually enriching relationships between humans and the environment, as part of global efforts to reduce the widening nature-culture divide. Its use often responds to a deliberate attempt to reflect the tightly interwoven links between nature and culture as expressed in land and seascapes all over the world. Not surprisingly, biocultural thinking is becoming a major trend in applied ecology, ethnobiology and related disciplines, and is gaining traction as an effective and just model for conservation policy and practice.

The contents of this course will provide a broad overview of current topics in the study of human-nature relations through a biocultural lens, recognizing the culturally rooted dimensions of complex social-ecological systems. All the lessons highlight, drawing on recent methodological and theoretical developments, that biocultural thinking is critical to sustaining both the biophysical and sociocultural components of dynamic, interacting and interdependent social-ecological systems. The different lessons are distributed as follows:

- Intersections between biological and cultural diversity
- Maintaining biocultural diversity: rights to land and culture
- Approaching conservation from a biocultural perspective
- Synergies and tensions between western and Indigenous knowledge systems
- Addressing threats to Indigenous and local knowledge systems
- Understanding human-nature interactions through the lenses of historical ecology and ethnobiology
- Advancing Indigenous Environmental Justice through a decolonized research agenda
- Digital technologies and mapping: a boon or bane for local communities?

The diverse collection of lessons and themes covered in this course will essentially highlight the myriad ways in which biocultural approaches foster transformations towards just, equitable and sustainable futures, and lead to increasing appreciation of the interwoven feedback loops between ecological states and human well-being, as well as ethical dilemmas in pursuing biocultural approaches.

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Documentary film visualization and debate	3	0.12	2, 3, 5, 7, 6
Practical lectures	13.5	0.54	3, 5, 1, 6
Role play debriefing	1	0.04	3, 5, 6
Theoretical lectures	13.5	0.54	2, 3, 5, 1, 7
Type: Supervised			
Personal work following instructions from teachers	20	0.8	4, 7, 6
Type: Autonomous			
Essay writing and oral presentation	28	1.12	4, 3, 5, 1, 6
Search and reading of scientific texts	66	2.64	4, 7, 6

The module consists in 12 sessions of 3 hours each. Sessions are divided into two parts. During the first part (1.5h), students attend a lecture and discuss associated readings. Students are expected to be prepared and have gone through the compulsory material before the class. During the second part (1.5h), students will learn about the different methods used to disentangle the interwoven relationships between biological and cultural

diversity, as well as basic negotiation skills for resolving conservation conflicts. They will also learn how to write for impact, whether for a policy, research, or general audience, in preparation for the final piece of writing that will be evaluated.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Assessment

### Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Active participation in class	20%	0	0	4, 2, 3, 5, 6
Environmental negotiation (role-play)	30%	2	0.08	4, 3, 5, 7, 6
Essay	30%	0	0	4, 3, 1, 7
Oral presentation of the essay	20%	3	0.12	3, 7

This module does not offer Single Assessment, as agreed with the coordination of the degree and with the Dean's Office of the Faculty of Sciences.

Students will be evaluated according to:

- Active participation in class (20%), showing an understanding of the scientific topics discussed and the readings, as well as participation in the discussions held in class. Teachers will keep a written record of all in-class attendance and interventions, and students will be evaluated based on whether they participate proactively with relevant and timely contributions that move the conversation forward. All sessions will feature a short discussion of the assigned material for each class, where students are provided with a space to critically reflect on the main ideas. In-person attendance is mandatory on this course. If a student misses a class, the student will have to inform the teachers in advance and write a 500-word critical essay on the materials for the missed class (to be delivered within a week after the missed class).
- Negotiation role play (30%). The performance of each student will be evaluated during the role play simulation, based on three main criteria: (a) the breadth and depth of the scientific arguments deployed during the negotiation; (b) the student's ability to reach optimal outcomes for the stakeholder they represent in the negotiation; and (c) use of the different negotiation techniques taught in the preparatory session before the class.
- Writing for impact (30%). The student will submit a piece of writing either in the format of an academic article, a journalistic article, or a policy article, on a topic of their choice relevant to the discussions in class.
- Short oral presentation (20%) of the essay during the last day of the course.

In this course, the use of Artificial Intelligence (AI) technologies is not permitted at any stage. Any work that includes AI-generated content will be considered a breach of academic integrity and may result in a partial or total penalty on the grade of the course, or more serious sanctions in severe cases.

## Bibliography

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## Software

None specifically needed.

## Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(TEM) Theory (master)	1	English	first semester	afternoon