Specialization Module Description

Title: Transdisciplinary Evaluation Learning Laboratory 2027 (TELL)

6 ECTS/5SWS

Module Manager: Prof. Dr. Erik Aschenbrand

Course Instructors: Prof. Dr. Erik Aschenbrand, Jana Gengelbach (both Eberswalde University for Sustainable Development - Department Landscape – Society – Economics), Prof. Anil Chaudhary (University of Pennsylvania, United States), Prof. Maureen Reed (University of Saskatchewan, Canada), Elisa Igersheim (Brandenburg Elbe River Landscape Biosphere Reserve), and additional faculty and practitioners from the TRANSECTS network member hub countries, including the University of Saskatchewan in Canada and Rhodes University in South Africa.

Course Schedule: 5 weeks in length, organized into the following components: (i) 3 week foundational course (online, part time); (ii) 2 week Transdisciplinary Evaluation Learning Laboratory (in-person, full time) (iii)

Physical Location: Brandenburg Elbe River Landscape Biosphere Reserve, Lower Saxon Elbe Valley Biosphere Reserve, Saxon Switzerland National Park Germany and Krkonoše National Park in Czech Republic and HNEE.

Module content:

This module is intended for Master students, enrolled in the BIOM study programme at Eberswalde University for Sustainable Development. It is part of the Transdisciplinary Education Collaboration for Transformations in Sustainability (TRANSECTS) project, affiliated with the Biosphere Reserve Institute. Throughout the module, there will be international touch points with parallel modules delivered in the other two hub countries, at Venda University in South Africa and the University of Saskatchewan in Canada, which are taking place during the same timeframe.

TRANSECTS is an innovative, transdisciplinary research training program and partnership that reimagines sustainability science education, prepares graduates to become the next generation of sustainability change makers, and offers opportunities for intercultural learning through shared international experiences and comparative analysis across the Global North and South. The network facilitates the transfer of scientific knowledge and insights from practitioners and communities to develop research training outcomes that are actionable and relevant to the needs of the communities that is engages with, and that benefits partners beyond academia.

This module focuses on the Elbe River and the collaboration among protected areas that it connects. The Elbe shapes the landscape of the various protected areas, creating unique landscapes, that give home to people, and places that find themselves often confronted with similar structural challenges because of it. The ELBE PARKS network, a formal cooperation between Germany and the Czech Republic along the river has been in place since 2020, connecting protected areas along the Elbe into a single network. Joint project proposals by various stakeholders in protected area management have not been successful to date, even though the practice partners see enormous potential for the collaborative sustainable management and development of the Elbe. In this module students will conduct research to understand the background and events that led to this development, and are identifying possible starting points that can strengthen the network's capacity for action and to advance the possibility of international cooperation among its' national parks and biosphere reserves.

Together with these practitioner partners, students will address issues in the areas of network sustainability, nature reserve management, transdisciplinarity, while taking into account the concept of "Rights of Rivers/Rights of Nature". They will explore questions about how the protected areas shaped by the Elbe River can work together with local communities and their perspectives to develop and enable sustainable visions for the future management, while simultaneously strengthening cross-protected-area cooperation. How do representatives of protected areas and other societal stake-holders view the river? How can international cooperation with respect to river management succeed?

In this context the students will be taught a range of sustainability science topics related to river ecosystem health, such as: drivers of biodiversity loss; land-use change effects; human-river interactions; river restoration; the rights of rivers scholarship; protected area management; international cooperation and the MAB program. Students will be guided to apply qualitative social research methodologies and conduct a transdisciplinary evaluation of the Elbe Park Network and derive actionable recommendations for the participating stakeholders.

In this module, participants will travel by kayak and on foot, along and across the Elbe River through various protected areas, gaining first hand insight into the conditions, challenges, and potential for cooperation, internationalization, and freshwater ecosystem conservation for lives and livelihoods in the participating protected areas.

The work will be transdisciplinary, with a focus on local perspectives and incorporating the "Rights of Rivers" approach. Practice partners include, among others, BUND/Friends of the Earth, Brandenburg Elbe River Landscape Biosphere Reserve, Lower Saxon Elbe Valley Biosphere Reserve, Saxon Switzerland National Park in Germany, and Krkonoše National Park (KRNAP) in the Czech Republic.

Learning Objectives / Methodological and Didactic Approaches / Teaching and Learning Methods:

This module is based on the Learning Laboratory approach, that promotes learning by creating an educational opportunity for students outside of the University lecture room to engage with real world sustainability challenges. Students learn to apply theoretical, scientific knowledge in a concrete practical case, for solution-oriented action. They learn about the principles for engaging diverse stakeholders and disciplinary and no-disciplinary perspectives, to identify solutions that and can serve as a basis for further cycles of reflection, development and adaptation. This pedagogical principle of problem-based learning, through practical application in the context of real-world sustainability challenges can support the integration of theoretic knowledge and foster a sense of responsibility for the process of learning and the results achieved, enhancing the relevance of academic education.

Students must draw upon multiple disciplines and ways of knowing to become proficient transdisciplinary professionals (whether academics or practitioners) who engage effectively with collaborators and communities throughout all phases of their work. In transdisciplinary research this is important from problem formulation to solution implementation, in order to address some of the worlds' most intractable problems. Consequently, they must master diverse bodies of knowledge, methodological and relational competencies, and professional skills.

Before trainees leave for the onsite portion of the TELL there is a 2 week online foundational course offered, as a series of virtual webinars. In the Foundational Course, students are equipped with theoretic skills that they can draw on while at the on-site portion of the TELL. It is taught by scholars and practitioners, ensuring common key learning outcomes are pursued and vital contextual knowledge is shared as trainees start their cross-cultural, engaged, learning experience.

All components of the TELL are taught in an interactive environment with an emphasis on critical thinking and open inquiry, with students working collaboratively to put evaluation research into action. Work will foster peer to peer and mentor to student learning opportunities for subsequent reflection. Students have the opportunity to strengthen key competencies for sustainable development, the core competencies needed to shape sustainable development in the region and beyond. During the TELL students will work in an intercultural and biodiverse settings to gain crucial transdisciplinary competencies and professional skills; enhance their critical, relational, and reflexive capacities; build their professional networks and can build a sense of social responsibility among the participants.

Competency Based Approach: This seminar focuses on acquiring and deepening the following methodological, technical and thematic competencies:

1. Strategic thinking and implementation skills →Methodological competence in real world project development

- Development of collective problem-solving strategies to address Practitioner identified research needs
- Planning, implementation, and evaluation of projects
- Building practical communication and presentation skills through professional presentation of project results to various practice partners and stakeholders

2. Competence in future-oriented and systemic thinking and integrated problem-solving competence → Design and process competencies:

- Development of future-oriented, context specific approaches to complex societal issues.
- Systemic methods for shaping sustainable development in the scope region
- Taking responsibility and working independently in a real-world project setting

3. Social and personal competencies → Interdisciplinary work:

- Learning transdisciplinary research approaches
- Learn good practises for effective and respectful collaboration in heterogeneous teams and interdisciplinary, non-disciplinary contexts
- Engaging in Peer-to-peer learning and knowledge exchange
- Personal reflection on the work process for adaptive learning

4. Socio-ecological system dynamics and nature conservation competencies → thematic sustainability science knowledge:

- Understanding drivers of biodiversity loss in river ecosystems
- Learning about effects of land-use change on river ecology and ecosystem functioning
- Gaining insights into historical and contemporary human-river interactions
- Learning the principles and concepts of river restoration and understanding the factors that can enable or constrain river restoration projects
- Learning from concrete river restoration case studies in different protected areas

Examination type

Project presentation (100%)