



Transdisciplinary International Learning Lab Guide

Mount Arrowsmith Biosphere Region and Vancouver Island University

General Information

Introduction to *TRANSECTS* and the TILL

*TRANSECTS*¹ is a research training collaborative and community of practice involving academic researchers and administrators, teachers, students, early career researchers, professionals, and practitioners. Our goal is to empower emerging scholars, professionals, and practitioners to become sustainability change-makers through innovative and flexible intercultural, educational pathways. The *TRANSECTS* team is made up of academics from Canada, Germany and South Africa who work closely with practitioner-partners in UNESCO Biosphere Regions (BRs) – an international network of model regions, designated to conserve biocultural diversity, advance sustainable development, and enhance local capacity for sustainability research, learning, and practice. The **Mount Arrowsmith Biosphere Region**² (MABR) and the **Mount Arrowsmith Biosphere Region Research Institute**³ (MABRRI), located at Vancouver Island University (VIU), are the hosts of the 2024 Transdisciplinary International Learning Lab (TILL). Read about previous TILLS and other *TRANSECTS* activities in our **January**⁴ and **May**⁵ newsletters available on our website and view the **student report from the 2022 TILL**.⁶

Learning Experience

Experiential Learning

The TILL is comprised of two parts: An online Foundational Course and the onsite Learning Lab. Additional opportunities for participation include an online series of Professional Development modules.

The online Foundational Course is a two-week series of webinars that include presentations, workshops, and assignments. It is curated to provide students with an introduction to the BR hosting the upcoming TILL, as well as transdisciplinarity and intercultural, collaborative work,

¹ See *TRANSECTS*, <https://sens.usask.ca/transects/>

² See Mount Arrowsmith Biosphere Region, <https://www.mabr.ca/>

³ See Mount Arrowsmith Biosphere Region Research Institute, <https://mabrri.viu.ca/>

⁴ See *TRANSECTS*, “*TRANSECTS Newsletter*”, <https://sens.usask.ca/transects/articles/transects-newsletter.php>

⁵ See *TRANSECTS*, “*TRANSECTS Newsletter - May 2023*,” <https://sens.usask.ca/transects/articles/transects-newsletter-may-2023.php>

⁶ See *TRANSECTS*, “*2022 Mini-TILL*,” <https://sens.usask.ca/transects/learning-opportunities/student-work/2022-mini-till.php>



suggested research methods, and more. The Foundational Course also allows the students the opportunity to meet their peers, mentors, and BR practitioners who will be onsite at the TILL. Students are expected to prepare by undertaking assigned readings and viewings and to participate directly in discussions. Students who cannot commit the time to the online Foundational Course may be requested to excuse themselves from the onsite Learning Lab.

The onsite Learning Lab is an experiential learning opportunity for graduate students and senior undergraduate students (where applicable). During the Learning Lab, the students will use a transdisciplinary (transD) approach to provide information and recommendations for a research need identified by the BR.

The online and onsite components of the TILL will be held during the dates below:

- Online Foundational Course (April 22-May 3, 2024)
- Onsite Learning Lab (May 8-June 16, 2024)

Students may also be asked to participate in reflection activities and focus groups outside of these dates, supporting our efforts to monitor and evaluate our learning to improve our teaching practice.

Transdisciplinary Research

Transdisciplinarity is an approach that brings together academic researchers and external partners to co-create new knowledge and practice. This approach to research has been promoted as a means to address complex societal challenges such as those associated with the United Nations Sustainable Development Goals. While participating in the TILL, students will be introduced to a wide range of research methods for working in social-ecological systems. Student groups, guided by their assigned mentor, will choose the transD research method(s) that will help to answer their research question. Throughout the TILL, students will increase their awareness and understanding of drawing from multiple disciplines and ways of knowing in all phases of their research – from problem formulation to solution recommendations and implementation strategies. This will help them become proficient transD professionals who engage effectively with collaborators and communities through all phases of their work when solving complex sustainability challenges in their future endeavors.

Distinction Between a TILL and a Field School

TILLs have been designed to reconfigure sustainability science education. They incorporate specific competencies and learning outcomes which make the experience separate from a conventional Field School. The distinction between a Field School and a TILL is highlighted in the table below.

Field School	Transdisciplinary International Learning Lab (TILL)
<p><i>Participant:</i> ‘Students’ – a narrowly-defined group that is typically limited to university and/or college students who elect or are required to take the Field School as a course within their programs.</p>	<p><i>Participant:</i> ‘Learners’ – a broadly-defined group that consists of university students and/or practitioners who have applied and been selected to participate in the TILL, as well as the host site staff and TILL instructor-mentors who are also faculty and who also ‘learn’ and build skills through immersion and participation in an intercultural, collaborative experience.</p>
<p><i>Research purpose:</i> Students go to a specific location to understand its complexities and conduct scientific research in order to gain field research experience.</p>	<p><i>Research purpose:</i> Learners are immersed in a real-world context (host site/region) to understand the social and scientific complexities as well as their own “place” within these complexities, and work with knowledge-holders to conduct scientific, socially situated research.</p>
<p><i>Research rationale:</i> Students either develop a research question based on a suggested research idea or make sense of a research question that is usually generated by others. They observe its relevance in the specific environment.</p>	<p><i>Research rationale:</i> Learners work with local people to refine a research question based on local needs and their own evolving understanding and skills. They spend substantial time understanding the local context and environment to facilitate this refinement.</p>
<p><i>Purpose of collaboration with local partners:</i> Students build interdisciplinary collaboration skills and may work with local research facilitators (often individuals with academic/scientific backgrounds) to improve access and communication.</p>	<p><i>Purpose of collaboration with local partners:</i> Learners refine collaboration skills, often in an intercultural setting, so they can partner on transD research with people from other cultures, disciplines, and backgrounds (including backgrounds outside of academia).</p>
<p><i>Contextualization:</i> Students develop an experimental skill set as they conduct a prescribed data collection process and methodology.</p>	<p><i>Contextualization:</i> Learners seek to deeply understand context and problems, then identify an appropriate research design (incl. a methodology and data collection) aligned with the evolving research question (often mixed methods).</p>
<p><i>Knowledge co-production:</i> Students may analyze data, but typically do so in accordance with the set research design and approach.</p>	<p><i>Knowledge co-production:</i> Learners analyze data collectively, interpreting with a variety of lenses that reflect a transD approach. Knowledge holders participate in reflection and interpretation.</p>
<p><i>Knowledge sharing and mobilization:</i> Findings are presented to an interested ‘community’ (might be local people but often limited to peers and other scientists).</p>	<p><i>Knowledge sharing and mobilization:</i> Findings are generated with input from community research partners and are oriented towards addressing or responding to an issue or problem presented by those partners.</p>

<i>Reflexivity and adaptive learning:</i> Students follow a prescribed research process with normally limited emphasis on reflexive practice and adaptive learning.	<i>Reflexivity and adaptive learning:</i> Learners incorporate reflexive practice throughout the research process to foster adaptive learning, improve their research skills, and further build readiness for engaging in future transD research.
<i>Role of learning experience in shaping sustainable transformation:</i> Students build understanding of, and learn to support, the socio-ecological transformation necessary for building more resilient and sustainable communities.	<i>Role of learning experience in shaping sustainable transformation:</i> Learners get to know creative methods with which they can develop their design and action skills so that not only support, but also begin to take responsibility for, such a socio-ecological transformation.

TILLs and Academic Programs

How the TILL contributes to a Graduate Program, or Undergraduate Program in specific circumstances, depends on the student’s university. Certain universities allow the TILL to fulfill an internship requirement or acknowledge the TILL as an accredited course. If this is not the case at a student’s university, research conducted through the TILL may form the basis of a student’s project, thesis, or dissertation. The table below details how the TILL could contribute to an academic program at each university. Students must contact their academic supervisor/program director and their country’s program manager if they are interested in having the TILL fulfill an academic requirement in their program. Alternatively, the TILL can be a supplemental learning experience to provide students with new knowledge, skills, and competencies to advance their academic and professional development.

Country	University	Potential Academic Program Requirements Filled by the TILL ⁷
Canada	University of Saskatchewan	Accredited course, research project, thesis/dissertation
	Vancouver Island University	Accredited course, research project, thesis/dissertation
Germany	Eberswalde University for Sustainable Development	Internship requirement, research project, thesis/dissertation
South Africa	Rhodes University	Research project, thesis/dissertation
	University of the Witwatersrand	Research project, thesis/dissertation

⁷ This must be confirmed with *TRANSECTS* prior to January 2024 after discussions with your academic supervisor/program director and *TRANSECTS* personnel (transects@usask.ca).



Information and Logistics

Application

You are enrolled as a senior undergraduate, Master's student, or PhD at one of the partner universities. A professional recommends you for funding through the program (e.g., research supervisor, professor, etc.). Strong English skills, both written and spoken. You complete your admission within the given application deadline.

Application Documents Checklist and Selection Criteria

Please submit the following documents to transects@usask.ca in the specified order in the form of a single PDF document of maximum 5 MB.

Application packages must be submitted by **October 15, 2023**.

Only a complete set of application documents submitted by the deadline above will be considered in the selection process.

Application package contents:

- Application form
- Referee details (reference form to be submitted separately by your referee)
- Enrolment information and certificate
- Proof of English language skills (applies only to students not currently enrolled in a study program taught in English)
- Current transcript of records/academic transcript
- Evidence of innovation/voluntary activities/academic experience
- TILL readiness reflection
- Motivation letter
- Declaration and privacy statement

Writing an Effective Motivation Letter

The overall goal and objectives of the TILLs is **to empower emerging scholars, professionals, and practitioners to become sustainability change makers through innovative and flexible intercultural, educational pathways**. Sustainability change makers are empathetic, reflexive, and impactful scholars and practitioners with competencies and skills to critically analyze, catalyze, and guide societal change towards a sustainable future. We seek trainees with the following attributes: Motivation and initiative, critical and reflexive thinking, perseverance and adaptability, teamwork/collaborative skills, and intercultural readiness.

Attributes	Indicators
Motivation and initiative	<ul style="list-style-type: none"> • Authentic desire to become sustainability change makers • Purpose of the planned participation for the further course of studies and /or professional future • Demonstration of leading an action
Critical and reflexive thinking	<ul style="list-style-type: none"> • Ability to identify problems or ask good questions, gather and assess relevant information, and synthesize knowledge • Analytical and logical thinking • Ability to give and receive constructive feedback • Ability to articulate one’s standpoint and consider how it affects one’s work
Perseverance and adaptability	<ul style="list-style-type: none"> • Ability to meet deadlines • Ability to navigate changing conditions • Evidence of working with scarce resources • Evidence of working through setbacks or overcome adversity
Teamwork and collaborative skills	<ul style="list-style-type: none"> • Demonstration of reliability, courtesy, responsibility for work and mistakes • Examples of showing compassion, empathy, and trustworthiness • Evidence of team building including coaching or motivating others and dealing with challenging relationships
Intercultural readiness	<ul style="list-style-type: none"> • Demonstrated efforts to contribute to a safe working environment • Openness to multiple ways of knowing and doing • Commitment to working with people of other cultures



Considerations that may help you write the motivation letter:

Before beginning any writing project, think about what you want the admissions committee to know. Your goal is to show the admissions committee that you have the motivation, experience, and team skills necessary to contribute to the Transdisciplinary International Learning Laboratory (TILL) and to succeed upon completion of the training.

Please write no more than 500 - 700 words and be sure to sign and date your letter.

The personal statement should give concrete evidence of your promise as a participant in the TILL. Be explicit, be succinct, and avoid jargon. Be honest about your contributions. We do not expect you to be a leader already or you would not have need of this program.

Explain to us:

- How your experiences or expertise meet the attributes described. Draw you're your academic (previous courses, training etc.), work background, as well as and life experiences.
- What is your motivation to participate in this program and where does it stem from?
- Is there a formative experience, a class project, or a person who inflamed your passion for sustainability? Be specific.
- Have you been involved in a project in school or at work that tested your ability to work with others? Have you experienced participating in a project that went awry? How did you adapt, persevere, and demonstrate teamwork?
- Have you worked with people from different socio-economic or cultural backgrounds, or who have had different life experiences than yours? We learn from both our successes and our failures; what did you learn from these experiences? How did you contribute?
- Provide more depth about your research and team-based experiences by explaining exactly what you did.
- Succinctly state your capabilities and also those attributes you wish to strengthen. You should also tell us why you wish to participate in the TILL, what aspects are of particular interest, and what you hope to learn from the experience. If there are any special circumstances or barriers you have faced in your education, you may report those as well.
- Review your statement to be sure that it is logically organized and free of typographical and grammatical errors. Ensure you do not exceed the space requirements.

Information Regarding Covid-19 and International Travel

In the current situation, reliable planning of stays abroad and an assessment of the situation for 2024 is not possible. Nevertheless, timely preparation for your stay abroad is necessary.



Please bear in mind that the classification of certain countries as COVID-19 risk areas may change throughout 2024. Be aware that you are travelling at your own risk. We strongly encourage you to inform yourself in detail about all consequences of this decision, especially about the respective valid rules for departure and return, about quarantine and testing obligations, about hygiene rules and other rules of conduct.

Please inform yourself about COVID-19 measures, possible travel restrictions, and the current situation in British Columbia at:

British Columbia Centre for Disease Control: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19>

The Government of British Columbia: <https://www2.gov.bc.ca/gov/content/covid-19/info>