

Proposed Sustainability Literacy Requirement

We propose the introduction of a sustainability literacy requirement (SLR) at the University of Waterloo. A SLR would require every undergraduate student to complete a course relevant to environmental sustainability in order to graduate. Courses that meet this requirement would be listed on a “Sustainability Literacy Courses List” and made available to students on the course calendar.

The SLR is similar to the communications requirement that currently exists at the University of Waterloo, which requires that all undergraduate students demonstrate a certain level of proficiency in English by taking a communications course. Similarly, we would argue that it is essential that all Waterloo graduates must have a level of sustainability literacy as we confront the climate crisis and transition to a low carbon future.

There are several different ways in which a SLR could be introduced. It is feasible that no new courses must be created and that a SLR may be integrated into the curriculum with little inconvenience to students. We recognize that each faculty designs curriculum in an unique fashion according to subject matter and will use their discretion to implement a SLR in a way that best accommodates student learning, based on faculty specific considerations. We would suggest that the University of Waterloo develop a list of courses relevant to environmental sustainability that could be embedded into various program structures in different ways. More prescriptive programs might choose to build a requirement into their program, while other programs might choose to allow students to take any of the listed courses to fulfill the requirement.

As leaders of this initiative, Ceileigh McAllister, Grace Cullinane, Emma Vandendries and Emma Kirke are facilitating a network of individuals and groups at the University of Waterloo that support the introduction of this requirement. The student group advocating for the SLR is doing so with the support of Climate Reality Project Canada.

Please see the following page for a rationale document.

Rationale

Competitive Advantage for Graduates

Integrating principles of sustainability literacy into the curriculum will provide graduates from the University of Waterloo with a competitive advantage over others in their field. Sustainability considerations and the environment are emerging in every field; from ESG and climate finance to green marketing to the implications of impact assessment on engineering projects. Deloitte recently declared that “[reducing environmental impact is now a business imperative](#)”, signaling that the impending transition to a low-carbon economy necessitates a generation of environmentally literate and sustainably minded workers. Graduates with a deeper understanding of the applications of sustainability, both generally and within their field, will be more hireable and more successful in their careers.

This transition is already in place across Canada. For instance, engineering programs in Quebec all include sustainable development in the curriculum and in order for a non-Quebec engineering diploma to be considered equivalent and for a permit to be granted to practice engineering in Quebec, [it must cover sustainable development](#). This places Waterloo graduates at a significant disadvantage if they wish to work in the province of Quebec, or in hiring and subsequent employment, compared to Quebec engineering alumni. Introducing this requirement will help Waterloo engineers, among our other graduates, have a sustained competitive advantage in the new economy.

Advancing the University of Waterloo as a Leader in Sustainability

The University of Waterloo is proud of our image as an innovative university that is “Beyond Ideas”. Being an early adopter of a SLR would advance our reputation as an innovative and forward thinking university. Other universities are already working towards similar initiatives, such as the recent referendum at [Concordia](#) and the work of Derek Gladwin at [UBC](#), signalling an inevitable academic shift to integrated sustainability education. As early adopters of such an initiative, Waterloo would set a precedent for other schools and offer UW a competitive advantage over other universities. Tangible metrics such as an increased [STARS score](#) or increased sustainability research outputs would cement our position as a sustainability leader among other Canadian universities with broader climate education.

Ethical Argument for Sustainability Literacy

Climate change has been dubbed the greatest threat to public health, global security, and the world economy of the 21st century. For such an enormous threat, general levels of comprehension surrounding climate change and sustainability are low. A [Lakehead University study](#) found 49% of Canadians do not feel well-informed about climate change and 86% feel like they need more information on climate change. Currently, climate education at a K-12 level is [piecemeal and inconsistent](#) across the country with many teachers reporting that they do not feel they have the tools or knowledge to teach it. Universities like the University of Waterloo

have the people and resources to give their students a firm grounding in climate literacy and must step up to do so.

Improving sustainability literacy is an essential step in advancing climate action. [The United Nations has stated](#) that “it is just as important to make progress in areas such as reducing greenhouse gas emissions and formulating effective government policies as it is to provide education and training to raise awareness in as wide an audience as possible”. [SDG target 4.7](#) also emphasizes the importance of sustainability literacy, “by 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development”. Greater rates of sustainability literacy help individuals be more informed voters, consumers, and citizens. Improving rates of sustainability literacy in Canada is especially important from a climate justice perspective. Canada produces a disproportionate amount of greenhouse gas emissions on a global scale, ranking as the [10th largest emitter per capita globally](#). This necessitates rapidly improving rates of climate literacy to accelerate climate action and emission reductions.

Supporting Existing University Policy

Integrating sustainability into university operations is already a priority for the University of Waterloo, such that integrating a SLR would support many existing university policies and goals. In the [University’s sustainability strategy](#), the first goal listed is to “[b]e a leader in sustainability education and research”. By becoming an early adopter of a SLR, the university would cement its reputation as a leader in sustainability education. In the more recent 2021 [Environmental Sustainability Report](#), the objective A1 echoed this goal, proposing “[b]y 2019, ensure undergraduate students from any program of study will have the opportunity to learn about sustainability in their courses”. The implementation of an SLR would further objective A1 by ensuring that undergraduate students of any program will study sustainability in their courses. Finally, in the last year, the university declared a [climate emergency](#), recognizing that as a “public institution with a robust academic reputation for research and teaching on climate change and energy, the University of Waterloo has a crucial role to play in climate action”. Introducing a SLR would be a tangible and actionable way to act on the climate emergency declaration and demonstrate a university-wide commitment to climate action.

As Waterloo celebrates its first 65 years and looks towards where our university will be at the end of its first century, we must [“multiply efforts to find innovative and sustainable solutions to achieve carbon neutrality”](#). Producing sustainability literate graduates is an important piece of Waterloo’s support of a sustainable future.