

The University and College Sector's Collective Response to the Global Goals

# **Embedding Sustainability in the Curriculum Microcredential**



#### **SDG focus**

### What did you do?

In the 2024/2025 academic year, a new microcredential was developed at the University of Galway. The title of this course was CEL6109 Embedding Sustainability in the Curriculum. It was designed as a 10 ECTS microcredential for any staff member to avail of and as an optional module in the Centre for Excellence in Learning and Teaching (CELT) Masters in Academic Practice. In addition, all campus staff members could avail of any individual session.

CELT supports innovative teaching and learning for all teaching staff on campus. The module was led by two Education for Sustainable Development (ESD) Lecturers in CELT and co-developed with ten members of staff from across the University. These included staff from: College of Science and Engineering; College of Arts, Social Sciences and Humanities; the Equality, Diversity and Inclusion unit, Student Services and the Sustainability Office. The module is due to run again in the 2025/26 academic year.



An tIonad Sárchaighdeáin Foghlama agus Teagaisc Centre for Excellence in Learning & Teaching



MICROCREDENTIAL CEL6109

# EMBEDDING SUSTAINABILITY IN THE CURRICULUM

Topics to be explored include:

- sustainability concepts, principles and practices;
- pedagogical approaches for sustainability;
- teaching techniques for embedding sustainability into the curriculum;
- digital tools for embedding the SDGS into university modules;
- spaces to sustain open conversations about climate and sustainability.

Participants will be encouraged to apply their learning in their own subject area.

10 ECTS (NFQ 9) Semester 1

www.universityofgalway.ie/celt

Photo by Daphné Richard on Unsplash.

Image: Embedding Sustainability in the Curriculum flyer

#### What were the benefits and outcomes?

1. The two Education for Sustainable Development (ESD) Lecturers have a remit to support staff to embed sustainability across the curriculum. These two Lecturers are funded by SATLE (Strategic Alignment of Teaching and Learning Enhancement) and work across four Colleges: Science and Engineering; Medicine and Nursing; Arts, Social Sciences and Humanities; and Business, Public Policy and Law. In codeveloping this course with staff members at the University, a transdisciplinary space was created for and with staff. Participants of the course were, for the first time, invited to engage across topics relating to sustainability terms and concepts; climate science; decolonising the curriculum; green labs; eco-anxiety; and curriculum design for sustainability, during the course of 7 sessions, each 3-hours in duration.

One participant stated: [I enjoyed] Meeting other academics and researchers from different disciplines and seeing how motivated everyone is about sustainability. Also, [I enjoyed] the great presentations and topics covered.

Another noted: I have already used some material on sustainability and strategy in my teaching module.

- 2. Upon completion of the module, participants formed a new Community of Practice (CoP) for ESD. The purpose of the CoP is to explore strategies and pedagogical practices related to the integration of ESD into the formal curriculum. Practicing the Head, Hand, and Heart model often used in transformative sustainability education, members seek to create a community whereby they share knowledge, discuss experiences and explore best practices, and create a community of support and inspiration for furthering ESD.
- 3. The module is organised as a series of stand-alone workshops, including guest lecturers, online resources, demonstrations, practical sessions, discussion, research and reflection. Participants of this module were supported to apply and practice their learning in their own subject area. Three of our 2024/2025 staff participants showcased their work as part of the **HEA ESD spotlight series**. These included:

# Matamaitic don Inbhuanaitheacht – An Irish-language Interdisciplinary Sustainability Module

*Dr Fintan Hegarty,* College of Science and Engineering, Mathematical and Statistical Sciences

## Embedding a Culture of ESD in a New Pharmacy Programme

Dr Joanne O'Dwyer, College of Medicine, Nursing and Health Sciences

# Learning Through Doing: Lessons from Stakeholder Engagement in Media Education

Dr Kelly Fincham, College of Arts, Social Sciences and Celtic Studies, Global Media

# What barriers or challenges did you encounter in embedding sustainability into your learning and teaching practice and how did you overcome them?

- 1. The greatest challenge in embedding sustainability across the curriculum is **time**. Staff members, particularly teaching staff carve out time within their teaching term to attend this course. Attendance was very good during the semester and online resources were available for staff who may not have been able to attend due to immovable work commitments. The two ESD lecturers were available for one-to-one meetings and provided feedback throughout the semester.
- 2. The 2024/2025 academic year saw the first iteration of the Embedding Sustainability in the Curriculum course. In terms of expertise, many of the participants who enrolled in the microcredential already had a strong interest in sustainability and were part of the wider Community University Sustainability Partnership (CUSP). Others were already very prolific in sustainability research. The microcredential added to all participants' learning and teaching expertise in ESD, particularly regarding pedagogical and curriculum design strategies.

To enhance **reach** and appeal to those who are unfamiliar with ESD and those who do not explicitly research in the area of sustainability, we leveraged three other pathways: i) the course was offered as an optional module in the Masters in Academic Practice; ii) the curriculum design aspects of ESD were integrated into the CELT Certificate in Teaching and Learning in Higher Education in the module on Course Design, Assessment and Evaluation; iii) the ESD curriculum design element of is also currently being used in workshops across Schools and disciplines in the university. In this way, staff across campus are exposed to ESD and made aware of options available in terms of training and resources. The CEL6109 Embedding Sustainability in the Curriculum course remains the main vehicle for embedding sustainability across the curriculum and ultimately, for an integrated and critical ESD experience, all staff are encouraged to enrol in this course.

3. Many teaching staff are adept in the **use of AI** tools to assist in everyday tasks. In addition, many official and accredited ESD training courses use AI to assist teaching and mapping SDGs and associated competencies. The two ESD Lecturers made a statement at the beginning of the course to explicitly set parameters for the use of AI in the module. Participants were aware of and discussed the energy consumption associated with AI and how, in a course that teaches sustainability, this point needs to be deliberated. There is currently a new and emerging literature around this and provision of more, and more accurate data on energy and AI will enhance dialogue during the next semester. An enhanced carbon literacy dimension will be introduced to the course in its next iteration, which will contribute to this discussion.

#### What are your conclusions and recommendations for others?

CEL6109 Embedding Sustainability in the Curriculum is taught entirely in-person and inplace at the University of Galway. One of the considerations in the planning of this course was deciding whether to offer in-person/online/blended options. The Lecturers decided to host an entirely in-person course to enhance experiential learning and utilise place-based pedagogies e.g. walking the biodiversity trail, exploring outdoor classroom spaces for relational pedagogies. In a busy HE environment, such efforts are often siloed into specific disciplines/schools/colleges or not undertaken at all. This course offers a new transdisciplinary space for interconnected global challenges and associated challenges in teaching and learning to be discussed.

Offering CEL6109 via a variety of pathways (e.g., microcredential; MA Academic practice; PGCert in Teaching and Learning in HE) and adapting sessions for continuing professional development opportunities (e.g., workshops, seminars) ensures wider dissemination of the content, especially the ESD curriculum design sessions. The Community of Practice (CoP) is essential to ensure that learning is not lost, but rather, is maintained, built on, and grows within the Schools, and within the wider learning and teaching community throughout the University.

#### Web link to further information:

https://www.universityofgalway.ie/centre-excellence-learning-teaching/about-esd/