

Curricular Affairs Committee of the Faculty Senate

MEMO

To: The UVM Faculty Senate

From: Curricular Affairs Committee of the Faculty Senate, Colby Kervick, Co-Chair

Date: October 7, 2021

Re: Approval of a proposal from the Graduate College and the College of Education and Social Services for a new graduate certificate and a new micro graduate certificate in Education for Sustainability

On October 7, 2021, the Curricular Affairs Committee approved the actions recommended in the following memo.

The Curricular Affairs Committee approved a proposal from the Graduate College and the College of Education and Social Services for a new graduate certificate as well as a new micro graduate certificate in Education for Sustainability. This proposal for a new Certificate of Graduate Study (CGS) and Micro-Certificate of Graduate Study (mCGS) in Education for Sustainability (EFS) is designed and sponsored through a collaboration between the College of Education and Social Services and Shelburne Farms and involve core faculty members from CESS (Simon Jorgenson and Regina Toolin), and the Rubenstein School of Environment and Natural Resources (Walter Poleman). UVM and Shelburne Farms share a goal of working to accelerate the transformative societal response to today's unprecedented and interconnected environmental, social, and economic challenges through education. The CGS in EFS comprises 18 credits of coursework, including 12 required credits via 4x courses that also compose the entirety of the mCGS in EFS, all of which have been approved for inclusion in the 2021-2022 Graduate Catalogue. The original proposed starting date listed on the CGS proposal was summer 2021. This has been revised to a proposed start in summer 2022.

Hereafter, descriptions of program rationale, assessment plans, etc. apply to both the CGS and mCGS in EFS, unless otherwise indicated, such as descriptions in specific reference to the mCGS.

** Penny Bishop, original sponsor of the proposals, has since accepted a Dean position at the University of Maine. Professor Simon Jorgenson has assumed the role of Program Director.*

Program Description and Rationale

The CGS in EFS prepares practicing educators to empower learners to make positive changes in their communities and shift societies to improve the quality of life for current and future generations. The planet is undergoing rapid and dramatic changes that threaten not only economies and coastlines but the ability of the planet to support life as we know it. Meanwhile, racism and systemic inequity continue to seep through all aspects of our society, leading to unjust and dangerous experiences for many. Educators seeking to

prepare their students for these realities need a new kind of professional learning. The CGS in EFS seeks to prepare learners to engage and thrive in a democratic and sustainable society through nurturing a sense of place, building an understanding of interdependence through systems thinking and systems sensing, and positioning students to discover their own agency through service-learning to lead learning and systems change across a variety of scales from classroom to community.

The proposed CGS in EFS is a collaborative effort with Shelburne Farms—an experienced partner who has engaged 5,000 educators over the past five years through their own EFS-focused professional learning programs. The proposed CGS and mCGS represent an outgrowth of place-based education initiatives developed by CESS faculty to pursue certificate opportunities identified in the *2018 CESS Strategic Plan*. The proposed CGS also honors UVM’s commitment to the Greater Burlington Regional Center of Expertise (RCE), a local network co-founded by UVM and Shelburne Farms that is among 155 RCEs that comprise the Global RCE Network, an initiative of the UN’s Education for Sustainable Development Project. The proposed CGS in EFS exemplifies the university’s land grant mission to prepare students to improve the well-being of people and planet and will help fulfill the mission to “prepare students to be accountable leaders who will bring to their work dedication to the global community, a grasp of complexity, [and] effective problem-solving.”

To earn the proposed CGS in EFS, students must complete 18 credits via 12 required credits (4 three-credit courses) and 6 credits of electives (detailed below). The mCGS requires 12 credits (4 three-credit core courses). The goal is to provide high-quality professional learning in Education for Sustainability to practicing educators, including k-12, post-secondary, and informal educators, so that they can successfully design, implement, and lead EFS with their own learners. Educators who complete the CGS in EFS are expected to be able to do the following:

- Demonstrate understanding of the concepts of socio-ecological systems nested within a local-to-global vision of sustainability in order to address social, environmental and economic issues with students;
- Design and implement EFS curricula that incorporates elements of transdisciplinary or concept-based design, and project- or inquiry-based learning;
- Co-create authentic and contextualized learning experiences that center student voice and agency, community impact and honor identity and positionality;
- Establish and nurture reciprocal relationships with community partners and other local resources in pursuit of the co-creation of engaging and authentic learning opportunities for students and significant contribution to the quality of life;
- Grow their capacity to participate in and lead a professional learning community through engaging in reflection and collaborative practices;
- Critically explore their own identity, positionality and personal journey as the starting point for transforming educational practices and systems; and
- Reflect upon and further develop their own personal and professional values and ethics in light of multiple perspectives on sustainability and social justice.

The mCGS in EFS is designed to meet the needs of students interested in EFS but facing logistical or economic constraints. The 4 required courses that compose all 12 credits of the proposed mCGS are the same core courses for the CGS described in the proposal as “the essential curricula necessary for preparing students to educate for sustainability, without the transdisciplinary focus of the full CGS-EFS.”

Graduate Certificate:

To earn the proposed CGS in EFS, students must complete 18 credits. The program requires four new core courses: (1) Foundations of Education for Sustainability (EFS) (EDCI 343), (2) Methods in EFS (EDCI 344), (3) Transformative Leadership in EFS (EDCI 345), and (4) EFS Inquiry and Action (EDCI 346). These courses have been developed in partnership with instructional faculty from Shelburne Farms. They have already been approved for inclusion in the 2021-2022 Graduate Catalogue. Students will also select 6 credits of elective courses from an array of options across campus. The proposed CGS in EFS is expected to increase enrollment in existing courses that are willing to increase enrollment. There are no required changes to existing courses to meet the needs of the CGS. The courses included were selected in consultation with UVM colleges, schools, and departments to distribute students across the sponsoring and supporting academic units.

Micro-Certificate:

The proposed 12-credit mCGS-EFS will meet the needs of students who are seeking to learn how to design and implement Education for Sustainability (EFS) curricula that incorporate elements of concept-based and project- or inquiry-based design. The four core courses are the same as the core courses in the CGS: (1) Foundations of Education for Sustainability (EFS) (EDCI 343), (2) Methods in EFS (EDCI 344), (3) Transformative Leadership in EFS (EDCI 345), and (4) EFS Inquiry and Action (EDCI 346).

This is the first and only sustainability-focused graduate certificate and mCGS in education proposed at the university.

Table 1. Required Coursework in CGS-EFS and mCGS-EFS.

CGS- EFS	mCGS- EFS
EDCI343 Foundations of Education for Sustainability (3 credits)	EDCI343 Foundations of Education for Sustainability (3 credits)
EDCI344 Methods in Education for Sustainability (3 credits)	EDCI344 Methods in Education for Sustainability (3 credits)
EDCI345 Education for Sustainability Inquiry & Action (3 credits)	EDCI345 Education for Sustainability Inquiry & Action (3 credits)
EDCI346 Transformational Leadership in EFS (3 credits)	EDCI346 Transformational Leadership in EFS (3 credits)
Breadth Course: Elective 1 (3 credits)	

Justification and Evidence for Demand

Educators report wanting to teach about complex issues such as food systems, climate change and racial injustice, which is important for society because education has the power to affect change in our local and global communities. As described in the CGS proposal, educators need content, resources, time, and opportunities to design units of study and engage in critical reflection. In order to change their practice, teachers require programming that models collaborative relationships, long-term duration, and contextualization of place, all of which have been incorporated into the four core courses of the proposed CGS in EFS.

The CGS proposal mentions four comparable graduate-level certificate programs currently offered in the United States: Manhattanville College in New York, West Chester University in Pennsylvania, and Antioch University New England offer Advanced or Graduate Certificates in EFS, and Webster University in Missouri offers a Graduate Certificate in Sustainability and Social Equity Studies. While these programs could be seen as comparable in terms of course content, there are several attributes that make this proposed CGS in EFS unique. Foremost, it requires more coursework and is more integrated in field-based learning than the others. The UVM CGS in EFS will be situated within a comprehensive Land-Grant University and offered in partnership with Shelburne Farms. Situated on two exemplary campuses, the CGS in EFS will have robust physical and environmental resources through which students will explore sustainability concepts. UVM is well-positioned to advance this CGS in EFS, as there are no examples of comprehensive, research-based universities engaged in EFS professional development for educators, and certainly none capable of drawing nationally for this audience. Locally, both Champlain College and Middlebury College offer education courses as well as sustainability related courses, but neither offer graduate-level coursework in Education for Sustainability.

Through the proposed CGS (and mCGS) in EFS, UVM's and Shelburne Farms' collaboration would provide the foundational course work to support educators, and thereby their students, to transform their schools and communities. Shelburne Farms continues to experience an increased demand for EFS programming as evidenced by enrollment in their programs. Over the past 5 years, 5,000 educators have engaged in Shelburne Farms' EFS-focused professional learning programs. In that same period, an earlier version of the four core courses proposed here in partnership with Shelburne Farms has had over 500 participants, with 51 of these enrolling in courses for graduate credit. During the summer of 2020, CESS and Shelburne Farms offered these courses collaboratively for the first time, resulting in 33 participants, with 13 graduate course registrations.

Based on the summer 2020 enrollment, as well as on the enrollment of EFS graduate certificates at other institutions, an average of 12-15 participants are anticipated to enroll in the CGS in EFS each year.

Relationship to Existing Programs

The proposed CGS in EFS would be the only sustainability focused CGS in education at UVM. The proposed CGS in EFS is a natural counterpart to CESS's new undergraduate certificate in Place-Based

Education (PBE). As CESS does not currently offer any sustainability-focused programming at the graduate level, the proposed CGS would provide graduates of the PBE undergraduate certificate an opportunity for continued professional learning at UVM after graduation. The proposed CGS (and mCGS) in EFS shares a titular focus on “sustainability” with other graduate certificate and degree programs at UVM, such as the CGS in Sustainable Enterprise and The Sustainable Innovation MBA (Grossman School of Business) and the new PhD program in Sustainable Development, Economics and Governance (CALs). The proposed CGS in EFS is distinctive in its focus on training practicing educators (e.g., k-12, post-secondary, and informal educators) to apply course content to the design, implementation and leadership of EFS initiatives, which require a specific set of curricular and pedagogical skills. The proposal also notes that required courses for the CGS in EFS will complement those offered in the Rubenstein School for the Master’s in Leadership for Sustainability (MLS) Program, and that Program Director Matt Kolan believes some MLS students would likely take electives offered for the CGS in EFS. Likewise, the CGS in EFS students would be able to take elective courses offered by the MLS program as electives.

Admission Requirements and Process

Prospective students will be required to complete an application for admission to the CGS in EFS. Application requirements include a short statement of purpose, academic transcripts, and three letters of recommendation, preferably one from a prior academic supervisor. Preferred candidates will have prior experience in education, will have completed undergraduate teacher preparation programs, or will have experience in related fields. Students must have successfully completed a bachelor’s degree, having earned at least a 2.5 GPA.

Anticipated Enrollment

The CGS proposal lists an anticipated enrollment of 12-15 participants each year.

Advising

The Program Coordinator of the M.Ed. in Curriculum and Instruction in CESS will advise students in the certificate programs.

Assessment Plan

The CGS and mCGS in EFS will undergo Academic Program Review (APR) within the College of Education and Social Services, as all four required courses are delivered by the Department of Education (CESS) and listed using EDCI prefix.

The CGS in EFS proposal outlines a six-page assessment plan (see Appendix A) in a three-year cycle that includes direct and indirect assessment components focusing on student experiences, outcomes, and program design, as well as engaging students in formative assessment of course learning objectives. Direct assessments of the CGS in EFS comprise: (1) Each year, UVM faculty, Shelburne Farms faculty, and students will co-create rubrics to be used in evaluating projects and presentations. (2) Also on an annual basis, the CESS Assessment Coordinator and Shelburne Farms staff will prepare a summary report of CGS in EFS statistics, feedback from students, and other relevant data related to learning outcomes to be presented at a CESS departmental meeting. (3) Every other year beginning in year 2, UVM faculty and Shelburne Farms staff teaching the EFS Inquiry and Research course will model the action research process and products (report and proposal) alongside students. (4) Every three years, the CESS

Assessment Coordinator, participating UVM faculty, Shelburne Farms faculty, faculty of comparable CGSs within the University, and student representatives will hold a curricular retreat to review student feedback, completion rates, and formative assessments.

Indirect assessments include yearly student surveys, a virtual newsletter of programmatic impacts and highlights shared with stakeholders every two years, and alumni surveys every three years. Assessment activities will be designed to ensure alignment with the CESS Diversity, Equity, and Inclusion Plan that includes six principles and implementation activities across the broad categories of People, Programs and Place.

Staffing Plan, Resource Requirements, and Budget

The proposers net revenue projection showed projections of positive net revenues. The CGS in EFS proposal states that no adjustments in present staff assignments will be necessary. The CGS will be offered through partnership with and material support from Shelburne Farms (Shelburne, VT). Instructional faculty for the program will be drawn from UVM. In addition, and on a co-teaching basis, faculty will be drawn from among the instructional faculty in Shelburne Farms education division. An arrangement for this instructional partnership has been reviewed by UVM Provost's office and General Counsel. A new Director position will be identified and CGS will be coordinated by them through the M.Ed. in Curriculum and Instruction.

The UVM library system currently has ample resources to support the CGS in EFS. The CGS in EFS does not have any UVM physical space needs, as courses will be either held in-person on the Shelburne Farms campus or offered on-line. No additional demands or equipment are anticipated.

Evidence of Support

Accompanying the CGS in EFS proposal were letters of support from: Dean William A. Falls (College of Arts and Sciences); Pat Fitzsimmons (Proficiency-Based Learning Team Leader, Vermont Agency of Education); Christopher J. Koliba (Faculty Director, Office of Engagement); Jane Kolodinsky (Chair, Community Development and Applied Economics); Dean Nancy E. Mathews (Rubenstein School of Environment and Natural Resources); Mike McRaith (Assistant Executive Director, Vermont Principals Association); V. Ernesto Méndez (Interim Chair, Department of Plant and Soil Science); Dean Leslie Parise (College of Agriculture and Life Sciences); Dean Sanjay Sharma (Grossman School of Business); Amy B. Trubek (Chair, Nutrition and Food Sciences); and Mary Brodsky (UVM Labor Relations).

Accompanying the mCGS in EFS proposal were letters of support from CESS Dean Scott L. Thomas, Brenda Solomon (CESS Curricular Affairs Committee Chair), and Graduate College Dean Cynthia Forehand who stated, "The Graduate College Executive Committee unanimously approved this proposal to establish the mCGS EFS in parallel with the larger 18 credit CGS EFS."

If approved by the Faculty Senate and the Board of Trustees these new graduate certificate and micro-graduate certificate would go into effect during the 2022-2023 catalog year.