Microcertificate in Fundamentals of Environmental Education

Under Review | Fall 2026

Proposal Information

Workflow Status

In Progress

Graduate Council Agenda Preparation, Graduate College Curriculum expand

Waiting for Approval | Graduate Council Agenda Preparation

Amanda Morales-Calderon
Lisa Anderson
Amy Glasscock
Sophia Mcgovern
Kayla Durazo

Proposal to Establish a New Program

Requested Term & Year (The first term for which applications will be accepted and students admitted.)

Fall 2026

This proposal can also be viewed at:
https://asu.kuali.co/cm/#/programs/view/68a78e6705ebceb443ffcc9b

General Information

Select Program Level and Type
Graduate certificate

General Program Information

College/School/Institute
Mary Lou Fulton College for Teaching and Learning Innovation (CTE)

Department/Division/School
Division for Advancing Education Policy, Practice and Leadership (CEDGRAD)

Name of Program
Microcertificate in - Fundamentals of Environmental Education | Review

Program

Fundamentals of Environmental Education

Degree Type

Certificate (CERT)

Proposing Faculty Group
NA

Responsible Faculty Member or Director
Molina Walters

Campus or Location options

Additional Locations

Add a Different Campus or Location
Yes

Other Location, Not Listed Above

If you are requesting ASU at Los Angeles, indicate in which building(s) the program will be located.

Are you requesting an online offering?
Yes

Complete the Request for Digital Immersion Implementation.

Program Description/Justification

The microcertificate program in fundamentals of environmental education provides a focused, interdisciplinary curriculum that equips participants with essential skills in environmental education, civic engagement, and sustainability. The program emphasizes experiential learning, scientific inquiry, and community-based problem solving, helping learners develop competencies in observation, data collection, communication, and systems thinking. Through hands-on fieldwork, nature journaling, and inquiry-driven projects, students will explore human-environment relationships, ecological systems, and

environmental justice frameworks, engage in local stewardship efforts, and interdisciplinary storytelling while gaining skills in communication, program design, and leadership that are transferable across diverse fields. These tools enable participants to support sustainability goals and promote both environmental and personal well-being.

Students completing the program will be able to:
-Apply scientific thinking to analyze environmental systems and human impacts.
-Communicate environmental issues effectively to diverse audiences.
-Develop educational materials and outreach strategies rooted in place-based, inclusive pedagogy.
-Engage in ethical decision-making and community action to promote sustainability and social equity.

This program strongly aligns with Arizona State University's charter and design aspirations by advancing the university's commitment to inclusion, community impact, and use-inspired research. It supports ASU's mission to serve learners from all backgrounds and prepare them to be socially embedded, globally engaged problem-solvers. By offering real-world, experiential learning opportunities, the program embodies ASU's design aspiration to fuse intellectual disciplines and transform society through use-inspired education.

The certificate complements existing environmental, sustainability, education, and science communication programs by offering a focused credential that bridges science and education with civic engagement and social change. It provides a clear pathway for learners interested in environmental leadership, education, and communication—whether they are preparing for a career, deepening professional skills, or exploring new ways to contribute to their communities.

The microcertificate meets a growing demand for flexible, skills-based learning opportunities that empower students to make an impact in their local and global environments. Given ASU's leadership in sustainability education and transdisciplinary innovation, this program builds upon institutional strengths while meeting the needs of learners and communities in a rapidly changing world.

Program Need

The market demand for professionals with expertise in environmental education and sustainability communication is growing rapidly, both nationally and within Arizona. According to the U.S. Bureau of Labor Statistics, employment of environmental scientists and specialists is projected to grow 7% from 2023 to 2033—faster than the average for all occupations—reflecting roughly 8,500 new openings annually. This growth is fueled by rising public concern about environmental issues, sustainability mandates across sectors, and the need for organizations to educate and engage communities around environmental action.

In Arizona, the state's diverse ecosystems, commitment to conservation, and expanding sustainability initiatives have created new opportunities for environmental educators in K–12 schools, nonprofit organizations, parks, and museums. The Arizona Association for Environmental Education's "EE Landscape Analysis" documents hundreds of outdoor and environmental learning programs across the state, while the Arizona Community Foundation identifies environmental protection and sustainability as top funding priorities. Together, these indicators point to a strong market demand for professionals who can design, implement, and assess environmental learning initiatives.

The target audience for the environmental education microcertificate includes early-career professionals, educators, and practitioners working in youth development, community organizations, conservation, or education settings who seek to integrate environmental learning into their work. By offering flexible, accessible coursework grounded in sustainability and community well-being, the program equips participants with the skills and credentials needed to meet workforce demand for sustainability-literate educators, facilitators, and communicators.

Graduates will be prepared for roles such as environmental educator or specialist, interpretive park ranger, sustainability education coordinator, curriculum designer, museum or zoo education manager, community outreach coordinator, and education consultant in environmental literacy. These positions span schools, government agencies, nonprofits, and private-sector sustainability programs—sectors that increasingly value professionals trained in environmental education theory,

practice, and civic engagement.

While ASU offers other programs related to sustainability and environmental education (see the related programs at ASU section below), this is the only graduate microcertificate in environmental education, and it is also one of two graduate certificates that are aligned with the requirements from the NAAEE and AAEE Guidelines for Excellence.

The Microcertificate in Fundamentals of Environmental Education complements the MLFC Graduate Certificate in Environmental Education by serving as a foundational credential that strengthens the professional pipeline for emerging environmental educators. The microcertificate introduces essential principles of environmental literacy, sustainability education, and instructional design aligned with the NAAEE and AAEE Guidelines for Excellence, preparing participants for advanced study in MLFC's graduate program.

Specialized Accreditation

State Authorization and Professional Licensure:

State Authorization and Professional Licensure:

Does this degree program include learning placement opportunities (clinical, externship, internship, research, student teaching, etc.)?
N

Will this degree program be offered via distance education (whole or in-part)?
N

Will in-person instruction be occurring in any jurisdiction, other than the State of Arizona?
N

Does this degree program potentially lead to professional licensure or certification (attorney, nurse, physician, teacher, etc.) for the student?
N

Collaborating Units

Are two or more academic units collaborating on this program?
No

Is this an officially recognized joint program?
No

Collaboration and Impact

List other academic units or programs that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs) and how the programs might complement each other. If there are no comparable programs, describe why the program is unique at ASU.
The ASU Microcertificate in Environmental Education is designed to provide an accessible, flexible, and practice-based entry point into the field of environmental education. This short-form microcredential complements the Master's Level Field Certification (MLFC) Graduate Certificate by strengthening the continuum of professional preparation, creating a clear and intentional pathway for lifelong learning and advancement in environmental education.

The Microcertificate in Fundamentals of Environmental Education is designed to extend the knowledge and experiences of undergraduate graduates from programs such as sustainability, environmental studies, biological sciences, integrated science and arts, biomimicry, and educational studies. It provides an applied bridge between foundational coursework and professional practice, preparing students to integrate environmental education into teaching, outreach, and community engagement roles.

At the graduate level, the microcertificate complements master's programs in sustainability, environmental resource management, biology, environmental science, curriculum and instruction, science education, and natural resource management by providing an applied focus on teaching methods, community engagement, and communication strategies. Through its alignment with the NAAEE and AAEE Guidelines for Excellence, the program strengthens professional preparation, supports certification pathways, and advances the integration of sustainability and education across disciplines and career sectors.

School of Sustainability degree - The Fundamentals of Environmental Education Microcertificate will deepen and broaden their knowledge by adding an environmental education perspective. This will enhance their understanding of environmental education and sustainable practices and goals in K-12 education and informal education settings. The proposed microertificate can be a valuable addition to a degree in sustainability. It can assist in the development of technical expertise and the ability to conceive and participate in multidisciplinary solution development in the area of sustainability. The microcertificate significantly enriches sustainability majors by integrating environmental education theory and practice, strengthening their ability to apply sustainability principles in K–12 and community contexts. We predict a high impact on the School of Sustainability degree.

Biomimicry degree - Biomimicry is the practice of learning from nature to solve human problems and is quickly gaining momentum as a leading approach to innovation and sustainability. The Fundamentals of Environmental Education Micro-Certificate will add depth of understanding and connections between Biomimicry and formal and informal education goals and standards. It will add a dimension of background knowledge about formal and informal education partners, like museums, zoos, and natural history museum organizations. It can assist in the development of technical expertise and the ability to conceive and participate in multidisciplinary solution development in the area of sustainability. Adds meaningful depth by connecting biomimicry principles to education, outreach, and informal learning environments, broadening graduates' capacity to communicate and apply nature-inspired solutions across disciplines. We predict a high impact on the biomimicry degree.

Integrated science and arts degrees are committed to interdisciplinary studies that address questions with global impact, such as understanding and managing the health of soils, water, plants, animals, and humans in our shared ecosystem, and recognize that the complexities and interconnectedness of our world have always required solution makers who can integrate knowledge. Environmental education is a focus that these degree-seeking students can choose. Expands interdisciplinary integration by linking scientific and artistic approaches to environmental learning, offering students an applied focus in environmental education aligned with global sustainability challenges. We predict a high impact.

K-12 teachers (or those pursuing a teaching career) in the sciences could earn this certificate and now be eligible to teach Environmental Science classes at their school, as well as potentially secure grants and other related initiatives. Teachers have

also completed the certificate and spent their summers working at camps, outdoor schools, and other similar settings. Provides direct career benefits by qualifying educators to teach environmental science, pursue related grants, and engage in outdoor or non-formal education programs, enhancing both credentials and employability. We predict a high impact. Educational Studies degrees prepare students for careers in education beyond the traditional classroom, focusing on instructional strategies and community learning. The Fundamentals of Environmental Education Microcertificate complements this by adding training in ecological literacy, sustainability, and outdoor education. Together, they equip graduates to engage diverse audiences in meaningful, place-based environmental learning across schools, parks, and community organizations. Strengthens existing coursework in instructional design and community learning by incorporating ecological literacy and sustainability education, improving graduates' readiness for work in schools, nonprofits, and park-based programs. We predict a moderate impact

The Microcertificate in Environmental Education complements Mary Lou Fulton's Graduate Certificate in Environmental Education by serving as a foundational credential that strengthens the professional pipeline for emerging environmental educators. The microcertificate introduces essential principles of environmental literacy, sustainability education, and instructional design aligned with the NAAEE and AAEE Guidelines for Excellence, preparing participants for advanced study in the graduate program. By offering flexible, accessible, and practice-based training, the microcertificate broadens participation and helps cultivate a well-prepared pool of educators ready to transition into Mary Lou Fulton's more in-depth graduate coursework focused on leadership, research, and program implementation. Together, these programs provide a coherent, tiered pathway for developing high-quality environmental education professionals across Arizona and beyond.

Attach a PDF copy of the letter of collaboration and impact from each Dean, or Dean's designee at the Assistant or Associate Dean level, from impacted programs and units consulted.

- FSE Impact Statement: Env Ed Grad Microcert.pdf
- Herberger Institute for Design and the Arts Impact Statement_ Env Ed Grad Microcert.pdf
- Watts College Impact Statement_ Env Ed Grad Microcert.pdf
- WP Carey Impact Statement: Env Ed Grad Microcert.pdf
- The College of Liberal Arts and Sciences Impact Statement: Env Ed Grad Microcert.pdf

Course Development

Will a new course subject be required for this program?
No

Will new courses be established?
No

Graduate Degree Curriculum

Is the proposed certificate a microcertificate of 9 credit hours?
Yes

Allow 400-level courses?
No

Minimum Credits Required for the Program
10

Curriculum Requirement Option 1
10 credit hours

Add another option?
No

Curriculum Requirement Option 1

10 credit hours

Min credits required for this option
10

Primary Requirement (Culminating experience)
Not Required

Additional Requirement(s)

Curriculum option course requirements

Required Core

10
Total Credits

- Complete 10 credits from the following courses:
  - SCN510 - Conservation of Biological Diversity (4)
  - SCN507 - Biomimicry for Sustainable Innovations (3)
  - SCN502 - Environmental Education: Investigating Global Issues (3)

Grand Total Credits: 10

Additional Curriculum Information

Sharing of Credit Hours with a Degree

Will this proposed certificate program allow sharing of credit hours from another ASU degree program to be used as part of this certificate program?
Students who complete the Fundamentals of Environmental Education Micro-Certificate can use their coursework from this program in either the Environmental Education Certificate or as focal area courses for the MA in Education.

Projected Enrollment

Enrollment Headcounts

	Number of Students Majoring
1st Year	5
2nd Year (Yr 1 continuing + new entering)	15
3rd Year (Yr 1 & 2 continuing + new entering)	30
4th Year (Yrs 1, 2, 3 continuing + new entering)	40
5th Year (Yrs 1, 2, 3, 4 continuing + new entering)	60

Additional Enrollment Information

Estimated Timeframe to Complete Program

What is the minimum timeframe that this program can be completed?
1 year or less

If necessary, please provide additional information.

Resources (Faculty, Staff and Others)

Current Faculty

Name	Title	Highest Degree Obtained	Area of Specialization or Expertise	Estimated Level of Involvement
Molina Walters	Clinical Professor	EdD	Curriculum and Instruction / Science, Environmental Education	High
Cyna Schuster	Clinical Asst Professor	EdD	Leadership and Innovation Environmental Education	High
Kai Strogen	Faculty Associate	MA	Education - Curriculum Development	Medium
Danielle Edges	Faculty associate	MA & MS	Education - STEM Environmental Education & Chemistry	Medium
Kate Studey	Faculty Associate	MA	Biology Sciences Environmental Education	Medium
Jenn Smith	Faculty Associate	MA	Curriculum & Instruction /Science education	Low
Katelyn Rowley	Faculty Associate	MA	Curriculum & Instruction /Science education - STEM	Low

New Faculty

Existing faculty members' area(s) of expertise will be re-examined, specialization-based Professional Learning Communities will be formed, and staffing will be adjusted across current faculty to optimize strengths and expertise. The core courses and clinical experiences will be designed and coordinated through the orchestrated efforts of multiple stakeholders, including, but not limited to, the Program Coordinator, full-time faculty, and Instructional Designer(s). We will follow hiring protocols if additional faculty are needed.

Several faculty members hold master's degrees in fields directly related to environmental education and sustainability, bringing specialized expertise and extensive applied experience to the program. Those with Master of Arts or Master of Science degrees include educators and practitioners with backgrounds in environmental science, sustainability education, curriculum design, conservation biology, and community engagement. Each brings more than a decade of professional experience in teaching, field research, and program leadership, ensuring that the microcertificate offers both academic rigor and practical

relevance while complementing faculty with terminal degrees.

Is your college in the process of reviewing the new faculty? Or has new faculty already been approved?
No

Administration of the Program
Mary Lou Fulton College has centralized services for graduate admissions (including face-to-face and online recruiting) and graduate advising, and the Division schedules, staffs and supports all courses in its hosted programs. Graduate admissions is supported by marketing staff (including a team of three graduate recruiters), the Office of Student Services (a small team of graduate admissions reviewers and supervisors), and the team of graduate advisors, which includes a director, several supervisors, and a growing team of advisors. Scheduling and staffing is supported by two staff at the division level and a scheduling team of three at the college level. Dr. Mo Walters is anticipated as the faculty program coordinator.

Required Resources
No additional budget expenditure is anticipated. Budget needs should be met through existing tuition. No new books, library holdings, equipment, laboratory space and/or personnel will be required at this time.

Resource Acquisition
None are needed at this time.

Graduate Program Admission Requirements

The below sections are for initial admission criteria setup for new programs. Once the program is approved, this section will display the admission text as it appears in the academic catalog/degree search.

Applicants must fulfill the requirements of both the Graduate College and the **[name of college]**. Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in **[subject area]** or related field; from a regionally accredited institution. Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of a student's first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

Name of College

Mary Lou Fulton College for Teaching and Learning Innovation (CTE)

Subject Area(s)

Is the minimum required cumulative GPA in the last 60 hours of bachelor's degree higher than the standard minimum of 3.00?
No

Is the minimum required cumulative GPA in an applicable master's degree program higher than the standard minimum of 3.00?

No

Applicants are required to submit:

- graduate admissions application and application fee
- official transcripts
- proof of English proficiency

Select additional requirements:

Additional Application Requirements/Materials

An applicant whose native language is not English must provide proof of English proficiency regardless of current residency. If applicable, list any English proficiency requirements that are supplementary to the Graduate College requirement.

If any required components require further explanation, explain here.

Additional Admission Information:

Graduate Application Information

Indicate the first term and year in which applications will be opened for admission. Applications will be accepted on a rolling basis after that time. The regular session is only available for summer.
Note: It is the academic unit's responsibility to display program deadline dates on their website.

Campus or Location	Term	Session
ASU Online	Fall	Regular
ASU Online	Fall	Session B (ASU Online only)
ASU Online	Spring	Regular
ASU Online	Spring	Session B (ASU Online only)
ASU Online	Summer	Regular

Application Deadlines

Modality	Term	Session	Deadline	Type
Online	Fall	Session A/C	2026/07/31	Rolling
Online	Fall	Session B (Online Only)	2026/09/24	Rolling
Online	Spring	Session A/C	2026/12/08	Rolling
Online	Spring	Session B (Online Only)	2027/02/09	Rolling
Online	Summer	Session A/C	2027/04/20	Rolling

Program Admission Deadline Website Address
https://education.asu.edu/

Fees

Is a program fee required?
No

Degree Search and Operational Information

Marketing Description

The microcertificate program in fundamentals of environmental education prepares you with the skills to lead sustainability and environmental education initiatives across diverse sectors. With hands-on fieldwork, collaborative projects and opportunities for global experiences, you will be prepared for careers in education, conservation, nonprofit leadership and community-based sustainability programs.

Degree Search Program Description

The microcertificate program in the fundamentals of environmental education equips students from all fields with essential knowledge and practical skills in environmental education, civic engagement, and sustainability. Open to both formal and non-traditional educators, the program builds environmental literacy and effective communication strategies for fostering community-based environmental learning.

Program experiences emphasize hands-on, place-based learning that extends beyond the classroom—from analyzing biodiversity in desert and tropical ecosystems to developing environmental education projects that connect science with community priorities. Through interactive fieldwork, case studies, and collaborative projects, students strengthen their ability to think critically and address real-world issues such as climate change, water scarcity, and biodiversity loss. Participants engage with community partners to design outreach initiatives, promote sustainable practices, and cultivate inclusive approaches to environmental problem-solving that support both ecological integrity and community well-being.

Provide a brief description of career opportunities available for this program.

Graduates of the fundamentals of environmental education microcertificate are prepared for careers that integrate education, sustainability and community engagement across diverse settings. Graduates can also apply their skills in emerging roles focused on climate education, sustainable urban development, and environmental justice, helping communities advance equitable and sustainable futures. Possible careers include:

- citizen science or public participation coordinator
- community engagement or outreach specialist
- environmental communication
- environmental education specialist
- environmental educator
- sustainability education or training coordinator

Global Experience: Provide a brief description of global opportunities or experiences (study abroad, international internships) available for this program.

Students in the fundamentals of environmental education microcertificate have the opportunity to expand their learning through global experiences, including study abroad programs and international field courses. For example, students may participate in ecology- and conservation-focused programs in tropical regions, such as Costa Rica, where they explore biodiversity, sustainability practices and community-based conservation initiatives. These international opportunities allow students to apply environmental education concepts in diverse cultural and ecological contexts, strengthen cross-cultural communication skills, and gain a deeper understanding of global environmental challenges and solutions.

ONET/SOC Codes: Career Options

19-3011.01 Environmental Economist19-2041.00 Environmental Protection Specialist19-4042.00 Environmental Specialist
25-1053.00 Environmental Sciences Professor19-2041.02 Environmental Restoration Planner

Professional Licensure

Additional Professional Licensure Information

Degree Search Contact Information and Support

Building Code
Academic and Office Building (AOB)

Room Number
300

Program Email Address
GraduateEducation@asu.edu

Program Office Telephone Number
480-965-5555

Program Website Address
https://education.asu.edu

Keywords
SustainabilityConservationOutdoorBiodiversityleadershipcommunityEnvironmental ImpactEnvironmental Science Environmentalism

List New Keywords

Select one (1) primary area of interest from the list below that applies to this program
---

Select one (1) secondary area of interest from the list below that applies to this program
Sustainability

Program Assessment

Attach a PDF copy of the assessment plan printed from the University Office of Evaluation and Educational Effectiveness assessment portal demonstrating UOEEE's approval of your assessment plan for this program.

- MCERT1752243272_UOEEE_received.pdf

Supporting Documents

Additional Supporting Documentation (Impact statements should be above under Collaboration and Impact)

Please describe the attached files and their relevance to the proposal.

Dependencies

Dependencies

There are no dependencies

Subject: Re: MLFC Request for Impact Statement: Env Ed Grad Microcert
Date: Monday, November 10, 2025 at 8:15:43 AM Mountain Standard Time
From: Alana Lackore
To: Teresa Wu
CC: Angelia Linder

Many thanks!

Best,
Alana

Alana Lackore
Director, Academic Operations
Mary Lou Fulton College for Teaching and Learning Innovation
Arizona State University
p: 602.543.2823
email: alana.lackore@asu.edu

From: Teresa Wu <Teresa.Wu@asu.edu>
Date: Saturday, November 8, 2025 at 9:11 AM
To: Alana Lackore <Alana.Lackore@asu.edu>
Subject: RE: MLFC Request for Impact Statement: Env Ed Grad Microcert

Alana,

FSE fully supports the proposed microcertificate program.

Cheers,

Teresa

Teresa Wu
Vice Dean, Academic and Student Affairs
President's Professor, School of Computing and Augmented Intelligence
Director, ASU-Mayo Center for Innovative Imaging
Ira A. Fulton Schools of Engineering
Arizona State University

From: Alana Lackore <Alana.Lackore@asu.edu>
Sent: Tuesday, November 4, 2025 3:24 PM
To: Kyle Squires <squires@asu.edu>
Cc: Carole Basile (Dean) <Carole.Basile@asu.edu>; Angelia Linder <Angelia.Linder@asu.edu>; Patrick Phelan (Professor) <phelan@asu.edu>
Subject: MLFC Request for Impact Statement: Env Ed Grad Microcert

Hello,

On this year's Academic Plan, the Mary Lou Fulton College for Teaching and Learning Innovation proposed a new, digital immersion graduate microcertificate in the Fundamentals of Environmental Education. The proposal is attached and program description is below. Will you provide a statement of impact/support from your college? We are happy to address any questions you might have. Thank you for your review and consideration.

Program Description

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This program strongly aligns with Arizona State University's charter and design aspirations by advancing the university's commitment to inclusion, community impact, and use-inspired research. It supports ASU's mission to serve learners from all backgrounds and prepare them to be socially embedded, globally engaged problem-solvers. By offering real-world, experiential learning opportunities, the program embodies ASU's design aspiration to fuse intellectual disciplines and transform society through use-inspired education.

The certificate complements existing environmental, sustainability, education, and science communication programs by offering a focused credential that bridges science and education with civic engagement and social change. It provides a clear pathway for learners interested in environmental leadership, education, and communication—whether they are preparing for a career, deepening professional skills, or exploring new ways to contribute to their communities.

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environments. Given ASU's leadership in sustainability education and transdisciplinary innovation, this program builds upon institutional strengths while meeting the needs of learners and communities in a rapidly changing world.

Best,
Alana

Alana Lackore
Director, Academic Operations
Mary Lou Fulton College for Teaching and Learning Innovation
Arizona State University
p: 602.543.2823
email: alana.lackore@asu.edu

Subject: Re: MLFC Request for Impact Statement: Env Ed Grad Microcert
Date: Thursday, November 6, 2025 at 10:33:39 AM Mountain Standard Time
From: Karen Schupp
To: Alana Lackore
CC: Carole Basile (Dean), Angelia Linder

Hi Alana:

The Herberger Institute for Design and the Arts supports the development of the proposed Graduate Microcertificate in Fundamentals of Environmental Education.

Sincerely,

Karen Schupp (she/her)
Associate Dean of Academic Programs and Curriculum
Herberger Institute for Design and the Arts
Arizona State University

Professor of Dance
School of Music, Dance and Theatre
Arizona State University

Senior Global Futures Scholar
Julie Ann Wrigley Global Futures Laboratory
Arizona State University

Editor-in-Chief
Journal of Dance Education

Want to meet? Schedule an appointment via Outlook or Calendly.

> On Nov 5, 2025, at 7:54AM, Renee Cheng <renee.cheng@asu.edu> wrote:
>
> Dear Alana,
>
> I am looping in Karen Schupp, our associate dean for academic programs and curriculum, who will review and respond.
>
> Thank you,
> Renee
>
> Renee Cheng

Senior Vice Provost and Dean
Herberger Institute for Design and the Arts
Arizona State University
rcheng@asu.edu

From: Alana Lackore <Alana.Lackore@asu.edu>
Sent: Tuesday, November 4, 2025 3:23 PM
To: Renee Cheng <renee.cheng@asu.edu>
Cc: Carole Basile (Dean) <Carole.Basile@asu.edu>; Angelia Linder <Angelia.Linder@asu.edu>
Subject: MLFC Request for Impact Statement: Env Ed Grad Microcert

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experiential learning opportunities, the program embodies ASU's design aspiration to fuse intellectual disciplines and transform society through use-inspired education.

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Best,
Alana

Alana Lackore
Director, Academic Operations
Mary Lou Fulton College for Teaching and Learning Innovation
Arizona State University
p: 602.543.2823
email: alana.lackore@asu.edu

<MLFC Microcert_Fundamentals of Env Education.pdf>

Subject: Re: MLFC Request for Impact Statement: Env Ed Grad Microcert
Date: Wednesday, November 12, 2025 at 2:20:13 PM Mountain Standard Time
From: Bradley Ryner
To: Alana Lackore
CC: Kenro Kusumi, Dan Cox, Magda Hinojosa, Kyle Rader, Brian Bottini, Carole Basile (Dean), Angelia Linder

Dear Alana,

The College of Liberal Arts and Sciences has reviewed your proposal to launch a new microcertificate in Fundamentals of Environmental Education. We foresee no significant impact on graduate programs in The College and support this program. We at The College look forward to this new degree and future collaborations.

With best,
Brad

Bradley D. Ryner (he/him)
Associate Dean of Graduate Initiatives
The College of Liberal Arts and Sciences
Associate Professor, Department of English
Arizona State University

From: Alana Lackore <Alana.Lackore@asu.edu>
Date: Tuesday, November 4, 2025 at 3:27 PM
To: Kenro Kusumi <Kenro.Kusumi@asu.edu>
Cc: , Paul LePore <Paul.Lepore@asu.edu>
Subject: MLFC Request for Impact Statement: Env Ed Grad Microcert

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emphasizes experiential learning, scientific inquiry, and community-based problem solving, helping learners develop competencies in observation, data collection, communication, and systems thinking. Through hands-on fieldwork, nature journaling, and inquiry-driven projects, students will explore human-environment relationships, ecological systems, and environmental justice frameworks, engage in local stewardship efforts, and interdisciplinary storytelling while gaining skills in communication, program design, and leadership that are transferable across diverse fields. These tools enable participants to support sustainability goals and promote both environmental and personal well-being.

Students completing the program will be able to:
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-Engage in ethical decision-making and community action to promote sustainability and social equity.

This program strongly aligns with Arizona State University's charter and design aspirations by advancing the university's commitment to inclusion, community impact, and use-inspired research. It supports ASU's mission to serve learners from all backgrounds and prepare them to be socially embedded, globally engaged problem-solvers. By offering real-world, experiential learning opportunities, the program embodies ASU's design aspiration to fuse intellectual disciplines and transform society through use-inspired education.

The certificate complements existing environmental, sustainability, education, and science communication programs by offering a focused credential that bridges science and education with civic engagement and social change. It provides a clear pathway for learners interested in environmental leadership, education, and communication—whether they are preparing for a career, deepening professional skills, or exploring new ways to contribute to their communities.

The microcertificate meets a growing demand for flexible, skills-based learning opportunities that empower students to make an impact in their local and global environments. Given ASU's leadership in sustainability education and transdisciplinary innovation, this program builds upon institutional strengths while meeting the needs of learners and communities in a rapidly changing world.

Best,
Alana

Alana Lackore
Director, Academic Operations
Mary Lou Fulton College for Teaching and Learning Innovation
Arizona State University
p: 602.543.2823
email: alana.lackore@asu.edu

Subject: Re: MLFC Request for Impact Statement: Env Ed Grad Microcert
Date: Wednesday, November 5, 2025 at 7:26:42 AM Mountain Standard Time
From: Cynthia Lietz
To: Alana Lackore
CC: Carole Basile (Dean), Angelia Linder, Chris Hiryak, Stephanie Alvey

Hi all, our college is happy to support this program. Cynthia

Get Outlook for iOS

From: Alana Lackore <Alana.Lackore@asu.edu>
Sent: Tuesday, November 4, 2025 4:30 PM
To: Cynthia Lietz <clietz@asu.edu>
Cc: Carole Basile (Dean) <Carole.Basile@asu.edu>; Angelia Linder <Angelia.Linder@asu.edu>
Subject: MLFC Request for Impact Statement: Env Ed Grad Microcert

Hello,

On this year's Academic Plan, the Mary Lou Fulton College for Teaching and Learning Innovation proposed a new, digital immersion graduate microcertificate in the Fundamentals of Environmental Education. The proposal is attached and program description is below. Will you provide a statement of impact/support from your college? We are happy to address any questions you might have. Thank you for your review and consideration.

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Alana Lackore
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Mary Lou Fulton College for Teaching and Learning Innovation
Arizona State University
p: 602.543.2823
email: alana.lackore@asu.edu

Subject: RE: MLFC Request for Impact Statement: Env Ed Grad Microcert
Date: Monday, November 10, 2025 at 5:15:37 PM Mountain Standard Time
From: Michele Pfund
To: Stacey Lippert, Alana Lackore, Ohad Kadan
CC: Carole Basile (Dean), Angelia Linder

Dear Alana,

Thank you for reaching out to W. P. Carey for an impact statement for the proposed graduate microcertificate in the Fundamentals of Environmental Education.
W. P. Carey foresees no impact from the launch of this microcertificate.

We wish you a smooth approval and implementation process.

Best,
Michele

Michele Pfund
Sr. Associate Dean for Education
W. P. Carey School of Business
Calendar managed by: Bianca Birchfield

From: Stacey Lippert <Stacey.Lippert@asu.edu>
Sent: Tuesday, November 4, 2025 3:32 PM
To: Alana Lackore <Alana.Lackore@asu.edu>; Ohad Kadan <Ohad.Kadan@asu.edu>
Cc: Carole Basile (Dean) <Carole.Basile@asu.edu>; Angelia Linder <Angelia.Linder@asu.edu>; Michele Pfund <Michele.Pfund@asu.edu>
Subject: Re: MLFC Request for Impact Statement: Env Ed Grad Microcert

Hi Alana,

I'm adding Michele Pfund, in place of me, for this conversation. She is our Sr. Associate Dean for Education in WPC and works with Dean Kadan on reviewing requests for impact statements.

Thanks,
Stacey

Stacey Lippert
Arizona State University | **W. P. Carey School of Business**
Assistant Dean, Graduate Programs
stacey.lippert@asu.edu | Ph: 480.727-3030

From: Alana Lackore <Alana.Lackore@asu.edu>
Date: Tuesday, November 4, 2025 at 3:29 PM
To: Ohad Kadan <Ohad.Kadan@asu.edu>
Cc: "Carole Basile (Dean)" <Carole.Basile@asu.edu>, Angelia Linder <Angelia.Linder@asu.edu>, Stacey Lippert <Stacey.Lippert@asu.edu>
Subject: MLFC Request for Impact Statement: Env Ed Grad Microcert

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Alana Lackore
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Arizona State University
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MCERT in Fundamentals of Environmental Education

TE-Mary Lou Fulton Teachers College

Mission

The mission of the Fundamentals of Environmental Education Micro-Certificate is to cultivate a new generation of environmental stewards equipped with scientific literacy, systems thinking, and innovative problem-solving skills. Through immersive, interdisciplinary coursework in biodiversity science, global environmental education, and biomimicry, students explore the ecological, cultural, and ethical dimensions of sustainability. In alignment with Arizona State University's charter—to measure success by whom we include and how they succeed, to advance research and discovery of public value, and to assume responsibility for the communities we serve—the program empowers learners to engage in evidence-based decision-making and develop actionable solutions to environmental challenges at local and global scales—advancing inclusive education, conservation leadership, and global stewardship.

Goals

The goal of the program is to help students understand the importance of environmental and social responsibility while employing inclusive, high-impact learning that cultivates environmental content knowledge, critical thinking, effective communication, and a commitment to sustainability.

Outcome 1

Students will make evidence-based decisions regarding environmental issues.

Concepts

Sustainability & Sustainable Development; Equity & Environmental Justice; Local/Global Responsibility & Stewardship; Ecosystem Health; Scientific and Systems Thinking; Nature-Based Solutions & Biomimetics; and Interdisciplinary Problem Solving

Competencies

Students will: Identify and analyze environmental problems; use and evaluate data and evidence; understand systems and root causes; design and assess solutions; address equity and justice issues; communicate decisions clearly; and apply knowledge to real-world actions

Assessment Process

Students in the Fundamentals of Environmental Education-Certificate program will be included

in this assessment.

Measure 1.1 The assignment is the Passion Project, Part 2, Accomplishments and Assessment in SCN 502 (Canvas, Module 7), in which students design and complete a self-directed project that reflects their personal commitment to environmental stewardship, integrating knowledge of global issues, equity, and sustainability strategies. It will be evaluated using a faculty-developed rubric. The dimensions on the rubric include Project Accomplishments, Challenges Faces, Solutions and Adaptations, Overall Project Value and Reflection, and Takeaways and Lessons Learned. The categories on the rubric are (e.g., Nailed It, Meeting Expectations, Approaching Expectations, Missing Expectations, Not Meeting Expectations).
Measure 1.2 (507 - how nature works where you are, to how nature works on a global scale) world)The assignment is the Final Biomimicry Global Design Challenge in SCN 507, in which students create an original biomimetic solution to a global sustainability problem aligned with the UN Sustainable Development Goals. It will be evaluated using a faculty-developed rubric. The dimensions on the rubric are Key Facts, Interesting Facts, Special Adaptations, Strategy and Functions, Photos, Design Drawing, Biomimic Card Description, Biomimic Card Problem Solved, and Biomimic Card Design Outcomes. The categories on the rubric are (e.g., Nailed It, Meeting Expectations, Approaching Expectations, Missing Expectations, Not Meeting Expectations).
Measure 1.3 (SCN 510 Conservation of Biological Diversity) world) The assignment is the Field Investigation Assignment: Hot Spots in SCN 510, in conducting hands-on ecological research and analysis, gathering and interpreting data to understand biodiversity patterns, threats, and conservation strategies. It will be evaluated using a faculty-developed rubric. The dimensions on the rubric include Hot Spot Introduction, Location Information, Endemic Specifics Research on Plants, Endemic Species Research: Mammals, Endemic Species Research: Birds, Endemic Species Research: Reptiles, Endemic Species Research: Amphibians, Threatened or Endangered Species #1, Threatened or Endangered Species #2, an Threatened or Endangered Species #3. The categories on the rubric are Nailed It, Meeting Expectations, Approaching Expectations, Missing Expectations, Not Meeting Expectations.
The MLFTC Office of Data Strategy and Compliance will annually generate reports specific to the measures/outcomes and supply them to faculty, who in turn analyze the results and generate actions for continuous improvement.

Measure 1	Performance Criterion 1
SCN 502, Environmental Education: Investigating Global Issues, Passion Project Part 2 assignment, assessed using a rubric.	A minimum of 80% of students who submit work will receive a rating of "Meeting Expectations" (56/70 points), assessment using a faculty-generated rubric.
Measure 2	**Performance Criterion 2**
SCN 507 Biomimicry for Sustainable Innovations, Final Biomimicry Global Design Challenge, assessed using a rubric.	Performance Criterion 2 A minimum of 80% of students who submit work will receive a rating of "Meeting Expectations" (56/70 points), assessment using a faculty-generated rubric.

Measure 3	Performance Criterion 3
SCN 510 Conservation of Biological Diversity, Field Investigation Assignment: Hot Spots, assessed using a rubric.	A minimum of 80% of students who submit work will receive a rating of "Meeting Expectations" (80/100 points), assessment using a faculty-generated rubric.