

# ESTABLISHING GRADUATE CERTIFICATES ARIZONA STATE UNIVERSITY GRADUATE EDUCATION

This form should be used by programs seeking to establish a new graduate certificate. All sections should be completed.

The graduate certificate is a programmatic or linked series of courses in a single field or in one that crosses disciplinary boundaries. The graduate certificate facilitates professional growth for people who already hold the baccalaureate degree, and it may be freestanding or linked to a degree program. The graduate certificate enables the university to respond to societal needs while promoting university cooperation with corporate, industrial, and professional communities.

Submit the completed and signed (chairs, unit deans) proposal to the **Office of Graduate Academic Programs** in Graduate Education. Mail code: 1003 and electronic copies to <a href="mailto:eric.wertheimer@asu.edu">eric.wertheimer@asu.edu</a> or <a href="mailto:amanda.morales-calderon@asu.edu">amanda.morales-calderon@asu.edu</a>.

#### Please type.

Contact Name(s): Leah Gerber	Contact Phone(s): 480-727-3109	
College: College of Liberal Arts and Sciences		
Department/School: School of Life Sciences		
Name of proposed Certificate: Environmental Communication and Leadership		
Requested Effective Term and Year: Spring 2017 (e.g. Fall 2014)		
Do Not Fill in this information: Office Use Only		
CIP Code:		

**1. OVERVIEW.** Below, please provide a brief overview of the certificate, including the rationale and need for the program, potential size and nature of the target audience, information on comparable programs (at ASU and/or peer institutions), how this program would relate to existing programs at ASU, and any additional appropriate information.

**Rationale and Need:** Scientists must go beyond publishing in journals if they want their research to be relevant to society. However, academic training rarely covers how to communicate with the press, the public, policy makers, and other relevant stakeholders. The School of Life Sciences at Arizona State University is uniquely poised to contribute important research to both broader impacts on society and to biological decision-making.

The focus of this certificate is to train graduate students in environmental sciences to communicate their findings to the broader public and decisions makers. The core course for this certificate is BIO 578 Environmental Leadership and Communication (originally taught as BIO 591 in Spring 2014). This course was developed based on the Aldo Leopold Leadership Training and has been designed to build skills specific to environmental policy and management. This certificate program will train graduate students to apply their training in communication, policy, and leadership to current environmental issues. The goal of this certificate is to give graduate students in environmental disciplines the important leadership and communication skills needed to increase their influence and reach above and beyond academia.

**Potential Size and Target Audience:** We anticipate enrolling 10-15 students in the initial two years of the certificate program. We expect the program to stabilize at 20-30 within four years. The target audience will be graduate students only who are interested in making a difference with their science, whether they want to work within or without academia. This certificate is only open to graduate students meeting graduate admissions requirements.

**Comparable Programs:** Below is an analysis of how the Environmental Communication and Leadership (ECL) certificate relates to other programs at ASU and other universities

Relationship to Existing ASU Programs: The School of Life Sciences offers the core requirement: Environmental Communication and Leadership as well as two of the leadership/policy electives and one communication elective. The School of Sustainability offers relevant leadership, policy, and communications courses. The School of Public Affairs offers many relevant policy courses to be included as electives. The Polytechnic School offers an International Environmental Law and Policy course to be included in our leadership/policy electives.

Below are related programs at ASU, including similarities/differences to the ECL certificate and web links. Following is a table that compares the related certificate and degree offerings and differentiates the ECL certificate.

- MS in Technical Communication
- Gradaute Certificate in Techinical Communication.
- MS in Environmental and Resource Management
- MPP in Public Policy (Environmental Policy Concentration)
- Master of Arts in Communication Studies (ASU West)
- Graduate Certificate in Global Sustainability Leadership\*
- Master of Sustainability Leadership
- Executive Master in Sustainability Leadership.

Table 1: Comparative ASU certificate and degree offerings.

Program	Overview	Difference from ECL certificate
MS in Technical Communication  College of Letters and Sciences	The MS in Technical Communication degree program will teach students how to design, produce, and manage print and digital texts using traditional and developing technologies. The curriculum provides students with a comprehensive understanding of the professional, cultural and ethical issues that shape the field; it balances theory and practice to ensure students develop the analytical abilities, technology expertise and hands-on skills necessary for success as a technical communicator. Students who complete the program will be accomplished writers, editors, designers and researchers who are able to respond effectively to a range of audiences, issues and communication situations. The program will prepare students for technical communication positions in the private, public and nonprofit sectors and will offer professionals the opportunity to further advance their careers.	This is a master's degree (36 credit hours including a thesis or an applied project), as opposed to the ECL certificate (15 credit hours). This program is designed for 21st century information economy and is not focused on environmental issues. The degree does not incorporate building of leadership or policy skills, which are two of the three major outcomes in ECL.
Graduate Certificate in Technical Communication College of Letters and Sciences	This Certificate is 18 credit hours. Through the technical communication program, students learn how to produce and communicate technical information using traditional and digital technologies. This certificate is a derivative of the MS in Technical Communication.	This certificate differs from the ECL certificate offerings in the same ways as the MS in Technical Communication degree: It is designed for 21st century information economy and is not focused on environmental issues. The degree does not incorporate building of leadership or policy skills, which are two of the three major outcomes in ECL.
MS in Environmental and Resource Management  Ira A. Fulton Schools of Engineering	The MS in Environmental and Resource Management program provides students with a background in the sciences, engineering, environmental science, natural resource management, environmental health and safety, or other affiliated areas with the regulatory and technical background to mitigate the environmental impact of industrial sources of pollution, ensure compliance with environmental regulations, and manage and preserve natural ecosystems. The curriculum focuses on areas such as environmental law, air pollution, soil and groundwater contamination, environmental toxicology, hazardous waste management, natural resources, worker health and safety, and international environmental laws and policies.	This is a master's degree with a 30 credit hours requirement; not a certificate like ECL. This program differs from the ECL certificate in not focusing in communication skill building. ECL provides the skills to effectively communicate with the public, including media and decision-makers.

MPP in Public Policy (Environmental Policy)  College of Public Service and Community Solutions; School of Public Affairs	The MPP program with a concentration in Environmental Policy prepares students at the master's degree level to apply sustainability principles and approaches to careers in a variety of fields that address environmental and, inevitably, human challenges. Students with a concentration in environmental policy will have the knowledge base and skills to bring sustainability solutions to corporate, government and nonprofit sectors. The concentration begins by building a foundation in environmental policy and theory through the core course work, followed by one elective that develops and deepens student expertise in specific areas and issues. The concentration is uniquely positioned to allow students to build careers in public policy analysis and administration, international development and nonprofit organizations.	This is a master's degree that requires 42 credit hours, as opposed to the ECL certificate's 15 credit hours. Sustainability focused. It does not have a focus on building leadership skills, a major outcome of ECL. Its communication build up brings sustainability solutions to corporate, government, and nonprofit sectors; ECL includes media and public communication.
Master of Arts in Communication Studies (ASU West)  New College of Interdisciplinary Arts and Sciences	This program advocacy prepares students for communication-intensive roles in such fields as public affairs, employee development, community relations, and grass-roots movements as well as in organizations dealing with political and health concerns.	Our program differs from the ECL in that is communication focused on interpersonal and organizational affairs, but does not focus on environmental public affairs or environmental leadership.
Graduate Certificate in Global Sustainability Leadership School of Sustainability, Julie Ann Wrigley Global Institute of Sustainability	This certificate is currently closed to applications.	This program was geared for working professionals, whereas this proposed certificate provides additional training for science-based graduate students.
Executive Master for Sustainability Leadership (EMSL)  School of Sustainability, Julie Ann Wrigley Global Institute of Sustainability	This program is a hybrid online and in-person program from the nation's leader in sustainability education is designed for working mid-career professionals working anywhere in the world and provides a solutions-based and outcomes-focused curriculum focused on: strategy, global context, communication and leadership.	This program differs from the ECL certificate in that it is geared for working professionals, whereas the ECL certificate provides additional training for science-based graduate students. Additionally, it is not focused on sustainability of/for the natural environment.
Master of Sustainability Leadership (MSL)  School of Sustainability, Julie Ann Wrigley Global Institute of Sustainability	This program was derived from the Executive Master for Sustainability Leadership. It is built around four themes: leadership, communication, strategy and global context. The program may be completed in two years and is an online degree designed for working professionals and practitioners anywhere in the world.	This program differs from the ECL certificate in that it is an entirely online degree and geared for a remote global student base. The ECL certificate provides additional training for science-based graduate students able to participate in a variety of in-person courses. Additionally, it is not focused on sustainability of/for the natural environment.

Other universities. The proposed ASU **Graduate Certificate in Environmental Communication and Leadership** differs from other university programs in two significant ways. (1) it is embedded in natural and social science disciplines; and (2) it provides discipline-specific training in designed to develop skills to engage journalists, policymakers, and other non-scientist audiences.

- UC Berkeley: The Professional Program in Leadership in Sustainability and Environmental Management (http://extension.berkeley.edu/upload/sustain\_environmental.pdf)
- University of Missouri: Leadership Certificate Program with an option for Environmental Leadership
  Focus with an emphasis of out-of-class leadership experience
  (<a href="http://leadership.missouri.edu/certificate/">http://leadership.missouri.edu/certificate/</a>).
- Duke University: Environmental Leadership Program https://nicholas.duke.edu/programs.
- UCLA: Leaders in Sustainability certificate program, which is open to graduate students from different fields (http://www.environment.ucla.edu/lis/).

#### 2. ADMINISTRATION AND RESOURCES

A. How will the proposed certificate be administered (including recommendations for admissions, student advisement, retention etc.)? Describe the administering body in detail, especially if the proposed certificate is part of a larger interdisciplinary agenda. How will the graduate support staffing needs for this proposed certificate program be met?

The Environmental Communication and Leadership graduate certificate will be administered by the School of Life Sciences (SoLS) graduate programs. The SoLS graduate program administration will 1) collect and process applications, including sending applications to the ECL certificate admissions committee for review, 2) ensure scheduling of courses so that a sufficient number of courses are offered each year and that the courses are offered during mutually exclusive times and 3) process the certificate completion documentation for students.

Applications will be reviewed by an ECL certificate committee, composed of advisory board members of the Center for Biodiversity Outcomes.

The Center for Biodiversity Outcomes (CBO) will work with the SoLS outreach coordinator to include the certificate on the SoLS website and help to maintain the accuracy and updates to that site (including matching the requirements to the degree search). CBO will assist with student programmatic offerings (student trainings, and others) and possibly modify the curriculum as the program evolves and expands. Finally CBO will work with the faculty participants to distribute information so that advising offices across campus are prepared to share information and advise students. CBO will be available as an additional resource for students in advising and retention. The central office staff that will facilitate reviews and iPOS approvals for the certificate will be the SOLS graduate office.

B. What are the resource implications for the proposed certificate, including projected budget needs? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this certificate, please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this certificate program.

The certificate program will not require additional resources. The bulk of the courses are currently being offered, and new courses will be developed without the need for new resources or faculty. Additionally, all of the participating programs from other ASU campuses have their own advising offices. These contacts were confirmed on 3/31/16 as the correct contacts for graduate advising:

- College of Public Service and Community Solutions
  - School of Community Resources & Development.

SCRDAdvising@asu.edu

Lynne Cody, Support services: 602 494-0164; Lynne.Cody@asu.edu Gyan Nyaupane, Graduate Program Director: 602-496-0166; Gyan.Nyaupane@asu.edu

 School of Public Affairs SPAAdvising@asu.edu

Nicole Boryczk, Graduate advisor: 602-496-0450; Nicole.Boryczk@asu.edu

 School of Social Work SSWAdvising@asu.edu

Laura Orr, Graduate advisor: 602-496-0800; laura.orr@asu.edu

- Fulton Schools of Engineering
   Graduate Advising office, Academic and Student Affairs: 480-965-1726; engineering@asu.edu
- Thunderbird School of Global Management
   Paula Freisen, Graduate Advisor: 602-987-7413; <a href="mailto:paula.freisen@thunderbird.asu.edu">paula.freisen@thunderbird.asu.edu</a>.
- Cronkite School of Journalism and Mass Communication Alexis Weiler, Graduate Advisor: 602-496-5055; Alexis.weiler@asu.edu
- W.P. Carey School of Business Graduate Advising <u>wpcareymasters@asu.edu</u>
   Tempe campus: 480-965-3332; Polytechnic campus: 480-727-5183; West campus: 602-543-6200
- ASU West New College
   Jan Lacey, Graduate Advisor: (602)543-6266; <a href="https://www.NCgradadvising@asu.edu">NCgradadvising@asu.edu</a>

#### 3. ADMISSIONS PROCEDURES AND CRITERIA

A. Admission criteria – Applicants must meet the admissions criteria for Graduate Education. Please also include any other additional admission requirements, e.g. type of undergraduate degree, minimum GPA, tests and/or entry-level skills that are required for this certificate program.
(http://graduate.asu.edu/sites/default/files/GraduatePolicies\_1.pdf)

<u>Degree(s):</u> Must have a B.A., B.S. or BAS in any field from an accredited institution. Examples include: Business, Education; Biology; Geosciences; Political Science; English; and others.

**GPA:** Minimum of a 3.00 cumulative GPA (scale is 4.0=A) in the last 60 hours of a student's first bachelor's degree program. Minimum of 3.00 cumulative GPA (scale is 4.0 = A) in the applicable Master's degree.

<u>English Proficiency Requirement for International Applicants:</u> (See Graduate Education policies and procedures) (<a href="http://graduate.asu.edu/admissions/international/english\_proficiency">http://graduate.asu.edu/admissions/international/english\_proficiency</a>):

Same as Graduate Education.

Required Admission Examinations: GRE GMAT Millers Analogies None required

<u>Other requirements</u>: Must have completed 12 *undergraduate* credit hours of natural or social science coursework related to the environment *at time of application for graduate certificate*. Must meet all other graduate admissions requirements. Courses will be reviewed by the SOLS graduate committee to ensure that they fulfill this requirement. Applicants must submit: 1. a Graduate Admissions application, 2. Official transcripts.

**B.** Application Review Terms - Indicate all terms for which applications for:

<u>To select desired box</u>, place cursor on the left side of the box, right click mouse, select *Properties*, under *Default Value* select *Checked*, press *OK* and the desired box will be checked

Spring (year): 2017

**C.** Projected annual admission/enrollment-How many students will be admitted immediately following final approval of the certificate? What are enrollment projections for the next three years?

We anticipate enrolling 10-15 students in the initial two years of the certificate program. We expect the program to stabilize at 20-30 within four years.

<sup>\*</sup>Applications will roll every Fall/Spring terms after this.

Enrollment projections for three years (including new and continuing students)

2017: 10-15 new students

2018: 20-30 students total; 10-15 new and 10-15 returning. 2019: 20-30 students total: 10-15 new and 10-15 returning

#### 4. ACADEMIC REQUIREMENTS

A. Minimum credit hours required for certificate (15 credit hour minimum)

Fifteen (15) credit hours are required.

**B.** Please describe the primary course delivery mode, (e.g., online, face-to-face, off-site etc.). Please note: If this proposed initiative will be offered completely online, clearly state that in this section.

The primary course delivery mode will be face-to-face, but will include online courses as they are developed in the future.

**C.** As applicable, please describe culminating experience required (e.g., internship, project, research paper, capstone course, etc.)

N/A

D. What knowledge, competencies, and skills (learning outcomes) should graduates have when they complete this proposed certificate program? Examples of program learning outcomes can be found at (https://uoeee.asu.edu/program-outcomes).

Students should be able to:

- Effectively communicate with the public, including media and decision-makers, on the scientific area of their expertise, translating complex and technical concepts into easy to understand language
- Demonstrate leadership skills such as strategic thinking/planning, team management, conflict resolution, collaboration, mentorship, self-reflection, empathy and respect.
- Describe what goals and incentives drive policy and decision-making for an organization, governmental organization, or other institution.
- E. How will students be assessed and evaluated in achieving the knowledge, competencies, and skills outlined in 4.D. above? Examples of assessment methods can be found at (http://www.asu.edu/oue/assessment.html).

Students will be assessed against the learning outcomes below in the core course, BIO 578: Environmental Communication and Leadership. Additionally, students will be assessed by the instructors of each of the courses listed as electives for the ECL certificate (below, and in Appendix D).

**Outcome 1.** Communication. Graduates of the Certificate in Environmental Communication and Leadership will be able to effectively communicate with the public, including media and decision-makers, on the scientific area of their expertise, translating complex and technical concepts into easy to understand language

**Measure 1.** Student mock interviews will be observed and evaluated in BIO 578 Environmental Leadership and Communication.

**Performance criterion 1**. 80% of the students must be evaluated as satisfactory by the supervising faculty (14 out of 20 points). Scoring will be based on clarity of message and delivery. Students will have the opportunity to conduct a second interview to improve their score.

**Measure 2.** Students will be evaluated in their use of social media as a tool to reach the public with their message in BIO 578 Environmental Leadership and Communication.

**Performance criterion 2.** 80% of students must receive a 14 points or higher (out of 20) in the social media assignment by the supervising faculty. Scoring will be based on how targeted the message was for the audience and media tool, clarity of message, and creativity.

**Measure 3.** Students will be tested on their ability to distill their message through the message box assignment in BIO 578 Environmental Leadership and Communication.

**Performance criterion 3.** 80% of students must receive a 14 points or higher (out of 20) in the message box assignment by the supervising faculty. Scoring will be based on the clarity of the distilled message and on the overall conceptual framework.

**Outcome 2.** Leadership. Graduates of this Certificate in Environmental Communication and Leadership will be able to demonstrate leadership skills such as strategic thinking/planning, team management, conflict resolution, collaboration, mentorship, self-reflection, empathy and respect.

**Measure 1.** Students will be evaluated on their ability to collaborate, work as a team, and strategic planning through a small group project in BIO 578 Environmental Leadership and Communication.

**Performance Criterion 1.** 80 % of students must demonstrate the ability to collaborate, work as a team, and strategic planning through a small group project by getting either a 4 or a 5 using the rubric below.

- 5- Greatly exceed expectations: Student works with the group, supports the ideas and work of others, contributes substantively to the strategic planning and works through to completion. The student also helps to resolve conflict and engages the talents of others
- 4 Exceeds expectations: Student works with the group, supports the ideas and work of others, contributes to the strategic planning and works through to completion. The student works well with others.
- 3 Meets expectations: Student works effectively with the group, through to completion, but does not take a leadership role in offering new ideas or helping solicit ideas from others. The student works well with others.
- 2- Below expectations: Student works effectively with the group, through to completion, but does not take a leadership role in offering new ideas or helping solicit ideas from others. The student has some conflicts with others.
- 1- Greatly below expectations: Student does not work effectively with the group, does not take a leadership role in offering new ideas or helping solicit ideas from others. The student has some conflicts with others.

**Measure 2.** Students will be evaluated on their strategic thinking through writing a proposal in BIO 578 Environmental Leadership and Communication.

**Performance Criterion 2.** 80% of students must receive a 14 points or higher (out of 20) in the proposal assignment by the supervising faculty. Grading of the proposal will be based on clarity of the writing and the extent to which the proposal translates a visionary concept into a strategy to be implemented and managed.

**Outcome 3.** Policy. Graduates of this Certificate in Environmental Communication and Leadership will be able to describe what goals and incentives drive decision-making for an organization, governmental organization, or other institution.

**Measure 3.** Students will be evaluated on their performance in creating a network map, including identification of "decision points" in BIO 578 Environmental Leadership and Communication.

**Performance criterion 3.** 80% of the students must be evaluated as satisfactory by the supervising faculty (14 out of 20 points). Points will be based on completeness of map including goals and incentives and identifying decision points.

F. Please state the satisfactory student academic progress standards and guidelines (including any time limits for completion).

Students will typically complete the certificate within a minimum of one year (two semesters) and a maximum of a six-year time limit. Students must abide by all Graduate Education policies including time limits and continuous enrollment to maintain satisfactory progress.

G. Will this proposed certificate program allow sharing of credit hours from another ASU degree program to be used as part of this certificate program? (Please note that a maximum of 12 graduate-level credit hours taken as a non-degree student at ASU, including as a part of a certificate program, may be used towards a future graduate degree at ASU).

Yes, this proposed certificate program will allow sharing credit hours from another ASU degree program to be used as part of this certificate program. Six credit hours of the total 15 credit hours for the certificate and degree program can be shared credit hours if the student is enrolled in a degree program. These credits can be from any type of class (e.g. electives or core) that fit in the curriculum of both programs. If the students are non-degree seeking (enrolled in certificate program only), they are limited to utilizing up to 9 credit hours towards a future graduate degree at ASU.

H. Below, please list all required and elective courses in the appropriate boxes (you may attach additional pages if necessary).

Please ensure that all <u>new</u> core course proposals have been submitted to the Provost's office through the Curriculum ChangeMaker online course proposal submission system before this initiative is put on the University Graduate Council and CAPC agendas. Please note: a minimum of 2/3 of the courses required for a graduate certificate must be at the 500-level or above.

Required Core Course			Credit Hours
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(3)
BIO 578	Environmental Leadership and Communication	Yes	3
	<u>Electives</u>		Credit Hours
			(12)
	three credit hours from each of the following three categories demic unit (See Appendix D for the complete list of course inf		approval of the
	Policy & Management		3
Communication		3	
Leadership		3	
	three credit elective course from any of the three categories a dit hours of approved 400 level coursework can appear on the		
	Various (Open Elective)		3
	Culminating Experience (if applicable)		Credit Hours (Insert Section Sub-total)
	N/A		
	Total required credit hours		15

<b>5. PRIMARY FACULTY PARTICIPANTS</b> - Please list all primary faculty participants for the proposed certificate, including home unit and title. You may attach additional pages if necessary.				
Name	Home Unit	Title		
Leah Gerber	School of Life Sciences	Professor		
Roland Burgman	W. P. Carey School of Business	Faculty Associate		
Minu Ipe	W. P. Carey School of Business	Clinical Associate Professor		
Daniel Sarewitz	School of Life Sciences	Professor		
David Guston	Department of Political Science	Professor		
Elizabeth Corley	School of Public Affairs	Associate Professor		
Spiro Maroulis	School of Public Affairs	Assistant Professor		
Larry Olson	Ira A Fulton Schools of Engineering	Associate Professor		
Nicole Darnall	School of Sustainability	Associate Professor		
Angelo Kinicki	W.P. Carey School of Business	Professor		
Kathy Kyle	School of Sustainability	Instructional Professional- Writing		
Rachata Muneepeerakul	School of Sustainability	Assistant Professor		
Terry Greene Sterling	Walter Cronkite School of Journalism and Mass Communication	Faculty Associate		
Richard Goldsand	School of Film, Dance & Theatre	Faculty Associate		
Mary Margaret Fonow	School of Social Transformation	Professor		
Behrang-Mobarakeh Foroughi	School of Community Resources & Development	Assistant Professor		
Rebecca Barry	School of Community Resources & Development	Senior Lecturer		
Derrick Anderson	School of Public Affairs	Assistant Professor		
Kathleen Andereck	School of Community Resources & Development	Professor		
Majia Nadesan	School of Social & Behavioral Sciences	Professor		

# **6. REQUIRED SUPPORTING DOCUMENTS**

(Please label accordingly, i.e., Appendix or Attachment A, B, etc.)

Please include the following with your proposal:

- A. Sample plans of study for students in the proposed program See Appendix A
- B. Statements of support from all deans and heads of impacted academic units See Appendix C

Bortram To	CHOOL DIRECTOR (PRINT/TYPE)	
SIGNATURE	Tolleun	4/10/15
Kenro Kus	sumi	
SIGNATURE	Kuno Kusu	母唐3/2015
	will be completed by Graduate Education following	the recommendations of facul
vernance bodies.		the recommendations of facul
e following section vernance bodies. IN OF GRADUATE EDUCAT		the recommendations of facul

7. APPROVALS - If the proposal submission involves multiple units, please include letters of support from those

<u>Please note:</u> Proposals for new certificates also require the review and recommendation of approval from the University Graduate Council, Curriculum and Academic Programs Committee (CAPC), the Academic Senate, and the Office of the Provost before they can be put into operation.

The final approval notification will come from the Office of the Provost.

GF1112G-89

units.

# Appendix A Sample Plans of Study

# Environmental Communication and Leadership Graduate Certificate

### Sample plan of study (one course per semester)

Spring 2017: ERM 540 International Environmental Law and Policy (3 units)

Fall 2017: BIO 578 Environmental Leadership and Communication (3 units)

Spring 2018: HSD 501 Science and Technology Policy (3 units)

Fall 2018: PRM 470 Environmental Communication (3 units)

Spring 2019: MGT 545\* Becoming Leaders Who Matter (3 units)

#### Sample plan of study (accelerated)

Fall 2016: ERM 540 International Environmental Law and Policy (3 units)

HSD 501 Science and Technology Policy (3 units)

MGT 545\* Becoming Leaders Who Matter (3 units)

Spring 2017: BIO 578 Environmental Leadership and Communication (3 units)

PRM 470 Environmental Communication (3 units)

<sup>\*</sup> MGT courses will incur additional program fees by the W. P. Carey School of Business, to be paid by student.

#### **APPENDIX B**

#### OPERATIONAL INFORMATION FOR GRADUATE CERTIFICATES

(This information is used to populate the Graduate Programs Search website.)

1. Provide a brief (catalog type - no more than 150 words) program description.

Scientists must go beyond publishing in journals if they want their research to be relevant to society. However, academic training rarely covers how to communicate with the press, the public, policy makers, and other relevant stakeholders. This certificate gives graduate students in environmental disciplines the important leadership and communication skills needed to increase their influence and reach above and beyond academia.

Breakdown of requirements for the academic catalog:

Core (3)

BIO 578 Environmental Leadership and Communication (3)

Electives (12)\*

Policy and Management (3)

Communication (3)

Leadership (3)

Open Elective (3)\*\*

#### 2. Contact and Support Information:

Office Location (Building & Room): LSA 212	Campus mail code: 4501
Campus Telephone Number: 480-727-3109	Program Director (Name and ASU ID):
	Leah Gerber, Irgerbe
Program email address:	Program Support Staff (Name and *ASU ID):
Sols.grad@asu.edu	Wendi Simonson, wsimonso
Program website address:	Admissions Contact (Name and *ASU ID):
https://sols.asu.edu/	Wendi Simonson, wsimonso

<sup>\*</sup> ASU ID (e.g. SHJONES)

**3.** <u>Application and iPOS Recommendations:</u> List the Faculty and Staff that will input admission/POS recommendations to Gportal **and** indicate their approval for Admissions and/or POS:

Name	ADMSN	POS
Wendi Simonson	Х	Х

4.	Campus(es) where program will be offered: *	$\boxtimes$	Downtown	$\boxtimes$	Tempe
			Online (only)	$\boxtimes$	West
		$\boxtimes$	Polytechnic		

<sup>\*</sup> Students must choose three credit hours from each of the three categories with approval of the School of Life Sciences. If a student takes a course for less than 3 credits, the student must take more than one course in that category to meet the 3 credit requirement. Please contact the School of Life Sciences for a complete list of courses.

<sup>\*\*</sup> Students choose one three credit elective course from any of the three categories above. Please note that only three credit hours of approved 400 level coursework can appear on the plan of study.

\* To select desired box, place cursor on the left side of the box, right click mouse, select Properties, under Default Value select *Checked*, press *OK* and the desired box will be checked 5. Keywords: (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.) Leadership, communication, policy, environment, environmental, sustainability 6. Area(s) of Interest: \* To select desired box, place cursor on the left side of the box, right click mouse, select Properties, under Default Value select *Checked*, press *OK* and the desired box will be checked **A.** Select one (1) primary area of interest from the list below that applies to this program. **Architecture & Construction** Arts **Business Communications & Media Education & Teaching Engineering & Technology Entrepreneurship Health & Wellness Humanities Interdisciplinary Studies** Law & Justice **Mathematics Psychology** STEM **Science Social and Behavioral Sciences Sustainability B.** Select one (1) secondary area of interest from the list below that applies to this program. **Architecture & Construction Arts Business Communications & Media Education & Teaching Engineering & Technology Entrepreneurship Health & Wellness** 

**Humanities** 

Law & Justice
Mathematics
Psychology
STEM
Science

**Sustainability** 

**Interdisciplinary Studies** 

Social and Behavioral Sciences

#### **APPENDIX C**

#### **Statements of Support**

# **College of Liberal Arts and Sciences**

From: Paul LePore [mailto:Paul.Lepore@asu.edu] Sent: Friday, September 25, 2015 3:01 PM

To: curriculumplanning@asu.edu

Cc: Jenny Smith

Subject: Fwd: Proposal to Establish a Graduate Certificate in Environmental Communication and

Leadership

Please accept our attached proposal - thank you.

Sent from my iPhone

Begin forwarded message:

From: Jenny Smith < <u>jenny.smith@asu.edu</u>>
Date: September 25, 2015 at 2:52:45 PM MST
To: Paul LePore < Paul.Lepore@asu.edu>

Subject: Proposal to Establish a Graduate Certificate in Environmental Communication and Leadership

Paul,

Please forward to <a href="mailto:curriculumplanning@asu.edu">curriculumplanning@asu.edu</a> the attached proposal to establish a graduate certificate in Environmental Communication and Leadership.

Thanks,

Jenny

#### **School of Human Evolution and Social Change**

11/19/2014

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <a href="mailto:kirowe@asu.edu">hirowe@asu.edu</a>

# Statement of support for the proposed Environmental Communication and Leadership Certificate

Alexandra Brewis Slade <Alex.Brewis@asu.edu>

Wed, Nov 19, 2014 at 11:02 AM

To: Anita Hagy Ferguson < Anita. Hagyferguson@asu.edu>

Cc: Helen Rowe <a href="mailto:kirowe@asu.edu">, "Michael E. Smith" < Michael E. Smith.2@asu.edu</a>>

Sent approval already to the Center email address. You might check there. Anyway, yes, SHESC is happy to support.

On Nov 19, 2014, at 10:08 AM, "Anita Hagy Ferguson" <Anita.Hagyferguson@asu.edu> wrote:

Dear Dr. Brewis Slade,

We are hoping to submit the attached certificate proposal soon. Can you please indicate the support of SHESC by reply email as soon as possible, but no later than Dec. 1?

Warm regards,

#### Anita Hagy Ferguson, MA

Project Manager, Center for Biodiversity Outcomes Julie Ann Wrigley Global Institute of Sustainability Biodiversity@ASU.edu

Ph.D. Candidate, Environmental Social Science

<01E9B6E0-3DBC-4D94-BB3E-D11185A5504C.png>

From: Center for Biodiversity Outcomes < Centerfor Biodiversity Outcomes @ exchange.asu.edu> Date: Friday, October 24, 2014 at 3:15 PM

To: Christopher Boone < Christopher.G.Boone@asu.edu>, Cameron Thies

<CAMERON.THIES@asu.edu>, Alexandra Brewis Slade <Alex.Brewis@asu.edu>

Cc: "Michael E. Smith" <Michael.E.Smith.2@asu.edu>, Miki Kittilson <Miki.Kittilson@asu.edu>, Helen Rowe <hirowe@asu.edu>

**Subject:** Statement of support for the proposed Environmental Communication and Leadership Certificate

Greetings,

I am writing to ask for your support for our proposed Graduate Certificate for Environmental Communication and Leadership (proposal attached). The goal of this certificate is to give

#### School of Sustainability

#### Wednesday, February 11, 2015 at 12:47:37 PM Mountain Standard Time

Subject: RE: Statement of support for the proposed Environmental Communication and Leadership

Certificate

Date: Wednesday, November 26, 2014 at 6:29:57 PM Mountain Standard Time

From: Candice Carr Kelman

To: Helen Rowe

CC: Anita Hagy Ferguson

Hi Helen and Anita,

SOS supports the development of this Certificate in Environmental Communication and Leadership.

Please let me know if you need a formal letter.

#### Best,

#### Candice Carr Kelman, Ph.D.

Assistant Director, School of Sustainability, Arizona State University



P.O. Box 875502 | Tempe, Arizona | 85287-5502 | PH: 480-965-4460 | Main: 480-965-2975 | Stay connected! Website | Facebook | Twitter

From: Helen Rowe [mailto:hirowe@asu.edu]
Sent: Wednesday, November 19, 2014 9:15 AM

**To:** Candice Carr Kelman **Cc:** Anita Hagy Ferguson

Subject: Fwd: Statement of support for the proposed Environmental Communication and Leadership Certificate

Hi Candice,

We are hoping to submit the attached certificate proposal soon. Can you please indicate the support of SOS by reply email as soon as possible, but no later than Dec. 1?

Thank you, Helen

----- Forwarded message -----

From: Center for Biodiversity Outcomes < biodiversity@asu.edu>

Date: Fri, Oct 24, 2014 at 3:15 PM

Subject: Statement of support for the proposed Environmental Communication and Leadership Certificate

To: Christopher Boone < Christopher.G.Boone@asu.edu >, Cameron Thies

< CAMERON. THIES@asu.edu >, Alexandra Brewis Slade < Alex. Brewis@asu.edu >

Cc: "Michael E. Smith" < Michael.E.Smith.2@asu.edu >, Miki Kittilson < Miki.Kittilson@asu.edu >,

Helen Rowe < hirowe@asu.edu>

#### Greetings,

I am writing to ask for your support for our proposed Graduate Certificate for Environmental

#### **School of Politics and Global Studies**



November 19, 2014

#### To Whom It May Concern:

The School of Politics and Global Studies supports the proposed Graduate Certificate for Environmental Communication and Leadership. It looks like a useful option for graduate students interested in this area of study.

Sincerely,

Cameron G. Thies Professor & Director

> School of Politics and Global Studies PO Box 873902 Tempe, AZ 85287-3902

(480) 965-8563 Fax: (480) 965-3929 http://pgs.clas.asu.edu/

# **College of Public Service and Community Solutions**

4/6/2015

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <a href="mailto:hirowe@asu.edu">hirowe@asu.edu</a>

#### Statement of support for the proposed Environmental Communication and Leadership Certificate

Kathleen Andereck <kandereck@asu.edu> To: Helen Rowe <hirowe@asu.edu> Mon, Apr 6, 2015 at 2:03 PM

Dr. Rowe

Thank you for contacting us about the new certificate in Environmental Communication and Leadership. On behalf of the College of Public Service and Community Solutions, we are pleased to provide our support for the certificate and are aware that college courses are included as options for your students. The college and schools involved have the capacity to accept students and we look forward to having them as a part of our classes.

Kathy Andereck

.....

Kathleen Andereck

Director of Curricular Initiatives, College of Public Service and Community Solutions

Director and Professor, School of Community Resources and Development Arizona State University

Mail Code 4020, 411 North Central Avenue, Suite 550 Phoenix, Arizona 85004-0690

Phone: (602) 496-1056 | Fax: (602) 496-0953 | E-mail: kandereck@asu.edu

https://mail.google.com/mail/u/0/2ui=2&ik=cb4d4b3be1&view=pt&search=inbox&msg=14c908c64e9cca45&siml=14c908c64e9cca46&siml=14c908c64e9cca46&siml=14c908c64e9cca46&siml=14c908c64e9cca46&siml=14c908c64e9cca46e9cca46e9cca46

#### The Polytechnic School

4/6/2015

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <a href="mailto:hirowe@asu.edu">hirowe@asu.edu</a>

#### Statement of support for the proposed Environmental Communication and Leadership Certificate

Ann McKenna <Ann.McKenna@asu.edu> To: Helen Rowe <hirowe@asu.edu> Cc: Larry Olson <larry.olson@asu.edu>

Mon, Apr 6, 2015 at 10:44 PM

Hi Helen.

The Polytechnic School in the Ira A. Fulton School of Engineering supports your proposed Graduate Certificate for Environmental Communication and Leadership. It is fine to use the two noted ERM courses in your program and this could be mutually beneficial to both our

Good luck with the proposal.

Best,

Ann

Ann F. McKenna, Ph.D. Professor and Director Ira A. Fulton Schools of Engineering, The Polytechnic School Arizona State University 6049 S. Backus Mall Sutton Hall 140J Mesa, AZ 85212 Phone: 480-727-5121

ann.mckenna@asu.edu

From: Helen Rowe < hirowe@asu.edu> Date: Monday, April 6, 2015 at 3:41 PM To: Ann McKenna <ann.mckenna@asu.edu>

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership Certificate

#### W. P. Carey School of Business

4/8/2015

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <a href="mailto:hirowe@asu.edu">hirowe@asu.edu</a>

#### Statement of support for the proposed Environmental Communication and Leadership Certificate

Tue, Apr 7, 2015 at 4:56 PM

Amy Hillman <AMY.HILLMAN@asu.edu>
To: Helen Rowe <a href="https://doi.org/10.100/10.100/">https://doi.org/10.100/</a>
Cc: Trevis Certo <a href="https://doi.org/10.100/">Trevis Certo@asu.edu><a href="https://doi.org/10.100/">Stacey Whitecotton <a href="https://doi.org/10.100/">Stacey Whitecotton@asu.edu></a>

Yes we are, thanks.

Amy

Amy Hillman, PhD

Dean | Rusty Lyon Chair of Strategy

Arizona State University | W. P. Carey School of Business

amy.hillman@asu.edu| (480) 965-3402

Office: BAC 600

From: Helen Rowe [hirowe@asu.edu] Sent: Tuesday, April 07, 2015 4:37 PM To: Amy Hillman

Cc: Trevis Certo; Stacey Whitecotton

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership Certificate

I wasn't aware, but perhaps I could make a note to this effect in the certificate document. Thank you for letting me know.

Does this mean you support the inclusion of these two classes in our certificate? Thanks!

Best, Helen

On Tue, Apr 7, 2015 at 3:40 PM, Amy Hillman <AMY.HILLMAN@asu.edu> wrote: Hello Helen,

https://mail.google.com/mail/u/0/?ui=2&ik=cb4d4b3be1&view=pt&search=inbox&msg=14c965127c6fdf0c&dsqt=1&siml=14c9651266fdf0c&dsqt=1&siml=14c9651266fdf0c&dsqt=1&siml=14c9651266fdf0c&dsqt=1&siml=14c9651266fdf0c&dsqt=1&siml=14c9651266fdf0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=1&siml=14c9651266ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c9666ff0c&dsqt=14c966

#### **School of Public Affairs**

4/4/2015

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <a href="mailto:hirowe@asu.edu">hirowe@asu.edu</a>

# Statement of support for the proposed Environmental Communication and Leadership Certificate

Karen Mossberger <Karen.Mossberger@asu.edu>
To: Helen Rowe <hirowe@asu.edu>

Fri, Apr 3, 2015 at 1:25 PM

Hi Helen -

We should be able to integrate a few students easily. I just wondered about scale.

We support the inclusion of our courses in this certificate, and we look forward to collaborating with you on this new program.

Reet

Karen

Karen Mossberger, Ph.D.
Professor and Director, School of Public Affairs
Arizona State University
411 North Central Ave., Suite 450
Phoenix, AZ 85004
602-496-1101
karen.mossberger@asu.edu

From: Helen Rowe [hirowe@asu.edu] Sent: Friday, April 03, 2015 1:22 PM

To: Karen Mossberger

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership Certificate

[Quoted text hidden]

https://mail.google.com/mail/u/0/?ui=2&ik=cb4d4b3be1&view=pt&cat=CBO%2FCertificate&search=cut&msg=14c80f5d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d962ef2ab&siml=14c80f6d96

#### **School of Social Transformation**

4/4/2015

Arizona State University Mail - Statement of support for the proposed Environmental Communication and Leadership Certificate



Helen Rowe <hirowe@asu.edu>

#### Statement of support for the proposed Environmental Communication and Leadership Certificate

Mary Fonow <MaryMargaret.Fonow@asu.edu>
To: Helen Rowe <hirowe@asu.edu>
Cc: Bryan Brayboy <Bryan.Brayboy@asu.edu>

Fri, Apr 3, 2015 at 7:06 PM

I support the certificate and I am aware that courses offered in the School of Social Transformation are included in the certificate. We have the capacity to accept students via the certificate. This s well conceived and well designed certificate, Best, Mary Margaret Fonow

From: Helen Rowe <a href="mailto:hirowe@asu.edu">hirowe@asu.edu</a>

Date: Fri, 3 Apr 2015 09:29:29 -0700

To: Mary Fonow <MaryMargaret.Fonow@asu.edu>

Subject: Statement of support for the proposed Environmental Communication and Leadership Certificate

Dear Mary Margaret Fonow,

I hope that you can provide us with a note of support for our proposed Graduate Certificate for Environmental Communication and Leadership (proposal attached) from School of Social Transformation The goal of this certificate is to give graduate students in environmental disciplines the important leadership and communication skillsneeded to increase their influence and reach above and beyond academia.

The certificate requires a statement of support from you that confirms that you are aware that the courses offered by your school are included in our certificate program and that your school has the capacity to accept students enrolling via the certificate.

To send your approval, please reply to this email with this statement (or similar), "I support this certificate and am aware that courses offered in the School of Social Transformation are included in this certificate. Our school has the capacity to accept students enrolling via the certificate."

https://mail.google.com/mail/u/0/?ui=2&ik=cb4d4b3be1&view=pt&search=inbox&msg=14c822e6f7e2330c&siml=14c822e6f7e2330c

#### Walter Cronkite School of Journalism and Mass Communication

#### Wednesday,)March)25,)2015)at)2:44:40)PM)Mountain)Standard)Time

Subject: FW: Participation in the proposed Environmental Communication and Leadership Certificate

Date: Wednesday, March 25, 2015 at 2:43:03 PM Mountain Standard Time

From: Leah Gerber

To: Helen Rowe (hirowe@asu.edu), Anita Hagy Ferguson

fyi

#### Leah2R.2Gerber

Professor, Ecology, Evolution and Environmental Science, School of Life Sciences Director, Center for Biodiversity Outcomes, Julie Ann Wrigley Global Institute of Sustainability



UNIVERSITY ARIZONA STATE

h" p://biodiversity.asu.edu/3333h" p://gerberlab.faculty.asu.edu/

From: Terese Greene [mailto:terese.greene@asu.edu]

Sent: Wednesday, March 25, 2015 2:36 PM

To: Leah Gerber

Subject: Re: Participation in the proposed Environmental Communication and Leadership Certificate

#### Great!

Let me know if there's anything I can do to help.

Also, if you know of students who might be interested please let them know about the Sustainability Writing class this fall. It's cross listed with BIO, and JMC (Journalism) and MCO (Mass Comm)

These are the course numbers.

SOS 494 SOS 591

JMC 494 and MCO 598

BIO 494 and BIO 591

Steve Pyne will also list Sustainability Writing as a class that applies to his graduate writing certificate.

Best

Terry

Terry Greene Sterling Writer in Residence Walter Cronkite School of Journalism and Mass Communication Arizona State University 602-625-2414

Twitter: @tgsterling

www.terrygreenesterling.com

On Mar 25, 2015, at 2:26 PM, Leah Gerber < Leah. Gerber@asu.edu> wrote:

#### Leah R. Gerber

Professor, Ecology, Evolution and Environmental Science, School of Life Sciences Director, Center for Biodiversity Outcomes, Julie Ann Wrigley Global Institute of Sustainability <image001.png>

http://biodiversity.asu.edu/ http://gerberlab.faculty.asu.edu/

From: Terese Greene [mailto:terese.greene@asu.edu]

Sent: Wednesday, March 25, 2015 2:26 PM

To: Leah Gerber

Subject: Re: Participation in the proposed Environmental Communication and Leadership

Certificate

Thank you. Is the certificate up and running yet? Terry Greene Sterling Writer in Residence Walter Cronkite School of Journalism and Mass Communication

Arizona State University

602-625-2414

Twitter: @tgsterling

www.terrygreenesterling.com

On Mar 25, 2015, at 1:27 PM, Leah Gerber < Leah.Gerber@asu.edu > wrote:

Thank you!

#### Leah R. Gerber

Professor, Ecology, Evolution and Environmental Science, School of Life Sciences Director, Center for Biodiversity Outcomes, Julie Ann Wrigley Global Institute of Sustainability

<image001.png>

http://biodiversity.asu.edu/ http://gerberlab.faculty.asu.edu/

From: Terese Greene [mailto:terese.greene@asu.edu]

Sent: Wednesday, March 25, 2015 12:57 PM

To: Candice Carr Kelman

Cc: Leah Gerber; Peter Byck; Kathryn Kyle; Terry Greene Sterling

(terese.greene@asu.edu); Rachata Muneepeerakul

Subject: Re: Participation in the proposed Environmental Communication and

Leadership Certificate

Hi All,

Leah, the class name has been changed to Sustainability Writing. It is

# School of Film, Dance, and Theater in collaboration with the School of Social Transformation

From: Mary Fonow MaryMargaret.Fonow@asu.edu

Subject: support letter for graduate certificate
Date: November 20, 2015 at 4:04 PM
To: Sharon Hall sharonjhall@asu.edu

Cc: Richard Goldsand Richard.Goldsand@asu.edu



Dear Sharon, I am the director of SST and co-teach SST 591 Transforma8onal Leadership and Embodied Ac8vism with Rich Goldsand. The course originates in SST and is cross-listed with Dance. Rich is employed in both units as an FA. We enthusias8cally support your cer8ficate and would be delighted to have the course included as an elec8ve. Best, Mary Margaret

Mary Margaret Fonow Director of the School of Social Transforma8on

#### **New College of Interdisciplinary Arts and Sciences**

From: Todd Sandrin

**Date:** Friday, March 18, 2016 at 11:59 AM **To:** Center for Biodiversity Outcomes

Cc: Leah Gerber, Anita Hagy Ferguson, Marlene Tromp

Subject: FW: Statement of support for the proposed Environmental Communication and Leadership Certificate

Dear Ms. David,

Thank you for your email and for the information regarding your proposed Graduate Certificate for Environmental Communication and Leadership.

New College anticipates no negative impacts of this degree program on any of its programs.

Faculty in our communication program, though, offer their perspective that the degree is missing a true communication focus. The communication section does not include a single COM course and might be enhanced by inclusion of relevant courses (e.g., COM 414: Crisis Communication).

Best regards,

**Todd Sandrin** 

#### Todd R. Sandrin, Ph.D.

Professor - School of Mathematical and Natural Sciences

Associate Dean - New College | Director - NCUIRE

New College | Arizona State University

(602) 543-6934 | Todd.Sandrin@asu.edu | Lab - http://sandrin-lab.asu.edu

From: Center for Biodiversity Outcomes < CenterforBiodiversityOutcomes@exchange.asu.edu>

**Date:** Tuesday, March 15, 2016 at 11:45 AM **To:** Marlene Tromp <a href="mailto:marlene.tromp@asu.edu">marlene.tromp@asu.edu</a>>

**Cc:** Leah Gerber < <u>Leah.Gerber@asu.edu</u>>, Anita Hagy Ferguson < <u>Anita.Hagyferguson@asu.edu</u>> **Subject:** Statement of support for the proposed Environmental Communication and Leadership Certificate

Greetings,

I am writing on behalf of Leah Gerber, Director of the Center of Biodiversity Outcomes, to ask for your support for our proposed Graduate Certificate for Environmental Communication and Leadership (proposal attached). The goal of this certificate is to give graduate students in environmental disciplines the important leadership and communication skills needed to increase their influence and reach above and beyond academia.

The certificate requires a statement of support from you that confirms that you are aware that the courses offered by your school are included in our certificate program and that your school has the capacity to accept students enrolling via the certificate.

Please send me your approval or any questions in a reply email. I apologize for the urgency, but we are up against a deadline of this Friday, March 18 for submitting the proposal, and **would sincerely appreciate your reply by Wednesday, March 16** if possible.

Thank you

# Línda David

Administrative Assistant Center for Biodiversity Outcomes Julie Ann Wrigley Global Institute of Sustainability 480-727-9873 Subject: Re: Statement of support for the proposed Environmental Communication and Leadership

Certificate

Date: Tuesday, March 29, 2016 at 3:47:26 PM Mountain Standard Time

From: Jeffrey Kassing < jkassing@asu.edu>

To: Anita Hagy Ferguson <Anita.Hagyferguson@asu.edu>

Hi Anita,

SBS would support the addition of these courses to the certificate. Doing so will not create any additional burden for SBS and we would appreciate having the courses listed.

Best,

jeff

Jeffrey W. Kassing Professor/Director School of Social & Behavioral Sciences Arizona State University 602-543-6631 jkassing@asu.edu dissentworks.com Sport, Media, & Culture Lab

From: Anita Hagy Ferguson < Anita. Hagyferguson@asu.edu>

**Date:** Tuesday, March 29, 2016 3:45 PM **To:** Jeff Kassing < <u>jkassing@asu.edu</u>>

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership Certificate

Thank you Jeffrey,

Would you be open to us adding these as course options to our certificate, and if so can you send me an email confirmation?

The certificate requires a statement of support from the director of each school that confirms that you are aware that the courses offered by your school are included in our certificate program and that your school has the capacity to accept students enrolling via the certificate.

Thanks for your help.

Warm regards,

Page 1 of 3

# Anita Hagy Ferguson, MA

480-965-7389

Project Manager, Center for Biodiversity Outcomes Julie Ann Wrigley Global Institute of Sustainability www.biodiversity.asu.edu



From: Jeffrey Kassing

**Date:** Monday, March 21, 2016 at 9:30 AM **To:** Todd Sandrin, Anita Hagy Ferguson

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership

Certificate

Hi Anita,

Dr. <u>Majia Nadesan</u> teaches our risk/environmental courses. In the past we have run the undergrad sections with a graduate cross list (CMN 598), allowing for grad students to take the 400 level course and do extra work to make it equivalent to a 500 level course. Thus, either of these could be listed as grad classes (special topics):

COM 414 Crisis Communication/CMN 598 COM 415 Risk Communication/CMN 598

The latter is more appropriate for your degree program and will be on a regular rotation as it supports our undergraduate certificate in risk communication.

In addition, at the graduate level Dr. Nadesan has taught:

CMN 598: Environmental Risk and Communication Advocacy. The syllabus is attached for this course.

Let us know if you need anything additional.

Best,

jeff

Jeffrey W. Kassing Professor/Director School of Social & Behavioral Sciences Arizona State University 602-543-6631 ikassing@asu.edu dissentworks.com Sport, Media, & Culture Lab

Page 2 of 3

From: Todd Sandrin < Todd.Sandrin@asu.edu > Date: Friday, March 18, 2016 5:35 PM

To: Anita Hagy Ferguson < Anita. Hagy ferguson@asu.edu>

Cc: Jeff Kassing < jkassing@asu.edu>

Subject: RE: Statement of support for the proposed Environmental Communication and Leadership Certificate

Thanks, Anita! I'm looping in Dr. Jeff Kassing, Director of our School of Social and Behavioral Sciences, who can provide for you information on COM 414 and other grad comm courses per your request.

Thanks! Todd

#### Todd R. Sandrin, Ph.D.

Professor – School of Mathematical and Natural Sciences
Associate Dean – New College | Director | NCUIRE
New College | Arizona State University

(602) 543-6934 | Todd Sandrin@asu.edu | Lab http://sandrin lab asu.edu

From: Anita Hagy Ferguson

Sent: Friday, March 18, 2016 4:43 PM
To: Todd Sandrin < Todd. Sandrin@asu.edu >

Subject: Re: Statement of support for the proposed Environmental Communication and Leadership Certificate

Thank you for your response Todd.

Is Comm 414 available as a graduate course and can you recommend a few other grad comm course that we could list as options in our certificate?

Warm regards,

#### Anita Hagy Ferguson, MA

480-965-7389

Project Manager, Center for Biodiversity Outcomes Julie Ann Wrigley Global Institute of Sustainability www.biodiversity.asu.edu



Page 3 of 3

# APPENDIX D: LIST OF ELECTIVE COURSEWORK

# **Policy and Management Elective Course Options**

Course number	Course Title	Credits
BIO 517	Uncertainty and Decision Making	3
SOS 518	Uncertainty and Decision Making	3
ERM 528	International Environmental Management	3
ERM 540	International Environmental Law and Policy	3
HSD 501	Science and Technology Policy	3
HSD 502	Advanced Science and Technology Policy	3
PAF 505	Public Policy Analysis	3
PAF 540	Advanced Policy Analysis	3
PAF 591	Topic: Organizations, Sustainability and Public Policy	3
SOS 591	Topic: Organizations, Sustainability and Public Policy	3
PAF 545	Organizations, Sustainability and Public Policy	3

# **Communication Elective Course Options**

Course number	Course Title	Credits
SOS 598	Topic: Creating your Own TED Talk	2*
SOS 591	Topic: Sustainability Communication	3
BIO 591	Topic: Sustainability Communication	3
SOS 594	Storytelling in Words and Equations	3
PRM 470	Environmental Communication	3
COM 414/	Topic: Crisis Communication	3
CMN598		
COM 415/	Topic: Risk Communication	3
CMN 598		
CMN 598	Topic: Environmental Risk and Communication Advocacy	3

# **Leadership Elective Course Options**

Course number	Course Title	Credits
SST 591	Topic: Transformational Leadership and Embodied Activism	1-3*
MGT 513	Mindful Leadership	3
MGT 545	Becoming Leaders Who Matter	3
NLM 560	Leadership and Ethics in the Nonprofit Sector	3

PAF 508	Organization Behavior	3
PAF 529	Organization Change and Development	3
PAF 574	Diversity, Ethics, and Leading Public Change	3

<sup>\*</sup>If a student takes a course for less than 3 credits, the student must take more than one course in that category to meet the 3 credit requirement.