



ESTABLISHING GRADUATE CERTIFICATES
ARIZONA STATE UNIVERSITY
GRADUATE COLLEGE

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 College. Mail code: 1003 and electronic copies to eric.wertheimer@asu.edu or amanda.morales-calderon@asu.edu.

Please type.

Contact Name(s): Caroline J. Harrison	Contact Phone(s): 480-965-8645
College: School of Sustainability	
Department/School: School of Sustainability	
Name of proposed Certificate: Environmental and Sustainability Economics	
Requested Effective Term and Year: Spring 2018 (e.g. Fall 2014)	
Is a program fee required? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Is the unit willing and able to implement the program if the fee is denied? N/A	
<i>Note: for more information about program fee requests, visit https://provost.asu.edu/curriculum-development/changemaker/form-instructions#fees</i>	
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.

The purpose of this graduate certificate is to provide focused training in the economic theory and methodological tools of environmental and resource economics (ERE). ERE provides a conceptual frame and a powerful modeling and empirical toolbox to examine human-environment interactions and their associated tradeoffs. It provides an approach to evaluate the consequences and social benefits and costs of changes to markets and environmental policies. The target audience for this certificate is MA/MS/PhD students in fields with a sustainability or environmental science or policy focus – including (but not limited to) Sustainability, Public Affairs, Biology, Environmental Social Science, Applied Mathematics, and Agribusiness – for whom training in ERE may be complementary to their research interests or career development. The exact size of the target audience is uncertain, but it is estimated that there are 20 - 50 students across these programs that may find it of interest based on emails and verbal requests. The certificate can further the career objectives of students seeking employment in government, non-governmental organizations, consulting companies, academia and the private sector.

There is currently no comparable certificate program at ASU. Students may specialize their studies in environmental and resource economics as part of the PhD degree in Economics here at ASU; however, this field is intended for specialists in Economics that have gone through a rigorous PhD sequence and is therefore not broadly accessible to students from other intellectual disciplines. Other ASU programs, such as in the School of Sustainability or the School of Public Affairs, have a small number of courses in ERE as a part of their Masters and PhD degrees. However, these courses stop well short of providing a systematic, in-depth (yet accessible) training in the skillset required for the application of economic tools to sustainability problems. This graduate certificate will address this gap.

There are only a couple of similar certificate programs at US institutions. These include a Graduate Certificate in Environmental and Resource Economics at [Portland State University](#) and a Certificate in Ecological Economics at the [University of Vermont](#). The proposed certificate is similar in some respects to the Portland State University certificate in terms of its core content; however, the ASU certificate places a greater emphasis on training in econometric and modeling methods to buttress students' analytic competency. The ASU certificate also defines the Economics of Sustainability more expansively to embrace electives in areas such as institutional analysis, dynamical systems modeling, and agent-based modeling. The precise level of demand for the proposed certificate is uncertain; however, the primary participating faculty for the certificate have repeatedly fielded questions from dozens of graduate students within the participating units, requesting advice on how to gain further training in ERE at ASU. Faculty within these units have also repeatedly expressed the need for such a certificate to the Program Director. The substantial amount of research and graduate education in sustainability and related fields across several different academic units at ASU also suggests that there may be significant interest.

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 admission process, recruitment and retention will all be done through the processes already established for the handling of students in the School of Sustainability. There is adequate support to launch and maintain the certificate for at least the next several years. The Program Director for the certificate will be responsible for the review of the applicants and recommendation for admittance to the program. If the program becomes very successful it may warrant its own support staff. Course content will be delivered by existing faculty with the possibility of transferring some of the credit hours into a graduate program with Graduate College approval.

- 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 proposed certificate is, with the exception of the final seminar, built upon existing courses taught by current ASU faculty and offered on their established schedules. Therefore, no additional personnel hours, materials, space or equipment is needed.

3. ADMISSIONS PROCEDURES AND CRITERIA

- A. Applicants must fulfill the requirements of both the Graduate College and the School of Sustainability.**

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in any field from a regionally accredited institution.

Applicants must have a minimum of a 3.00 cumulative GPA (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 of a 3.00 cumulative GPA (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. proof of English proficiency

Additional Application Information

An applicant whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Prerequisite coursework: None, however it is strongly recommended that students have at least one semester of calculus (or equivalent such as MAT 251 Calculus for Life Sciences, MAT 265 Calculus for Engineers, SOS 211 Calculus and Probability).

B. Application Review Terms

Indicate all terms for which applications for admissions are accepted:

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

Fall (year): 2018

Spring (year): 2018

Summer (year):

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 expect an initial admission of 10 students. Enrollment projections in the next three years are expected to be 10 new enrollees per year. Depending on when students were admitted to the program the estimate is for 10 new and 10 continuing students in each subsequent year.

Year 1	Year 2	Year 3
10	20	20

4. ACADEMIC REQUIREMENTS

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

A minimum of 17 credit hours are required for this certificate.

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 will be face-to-face, although some elective courses may be offered as icourses at a later date.

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

No culminating experience required.

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>).

1. Graduates of the certificate program will be able to identify and evaluate the economic assumptions embedded in policy analyses and recommendations.

2. Graduates of the certificate program will be able to critically evaluate the methodological rigor of written and oral presentations of research in environmental and resource economics and assess the implications of their findings.
3. Graduates of the certificate program will be prepared to apply economic modeling approaches to real-world cases.

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>).

Outcome 1: Graduates of the certificate program will be able to identify and evaluate the economic assumptions embedded in policy analyses and recommendations.

- Performance criterion 1: SOS 512 Environmental and Resource Economics

90% or more of students will average a grade of B or better on assignments in SOS 512.

Discussions of policy-focused academic papers are a subject of class discussions (30% of course grade based on quantity of comments, accuracy and relevance to the topic), and the final course paper (30% of course grade) requires evaluating the economic assumptions behind existing policy analyses and the development of new economic models that speak to policy.

- Performance criterion 2: SOS 529 Seminar in Environmental and Sustainability Economics

90% or more of students will meet the criteria for active participation in discussions of presentations of current research in SOS 529. Discussion contributions by individual students will be assessed based on quantity of comments, accuracy and relevance to the topic.

Outcome 2: Graduates of the certificate program will be able to critically evaluate the methodological rigor of written and oral presentations of research in environmental and resource economics and assess the implications of their findings.

- Performance criterion 1: SOS 512 Environmental and Resource Economics

90% or more of students will meet the criteria for active participation in discussions of reading assignments in SOS 512. Discussions of academic papers comprise 30% of the course grade, where discussion of methodological aspects of the papers is emphasized. Discussion contributions by individual students will be assessed based on quantity of comments, accuracy and relevance to the topic.

- Performance criterion 2: SOS 529 Seminar in Environmental and Sustainability Economics.

90% or more of students will meet the criteria for active participation in discussions of presentations of current research in SOS 529, specifically regarding the critical evaluation of methodologies within the current research presented in the seminar. Discussion contributions by individual students will be assessed based on quantity of comments, accuracy and relevance to the topic.

Outcome 3: Graduates of the certificate program will be prepared to apply economic modeling approaches to real-world cases.

- Performance criterion 1: SOS 512 Environmental and Resource Economics

90% or more of students will average a grade of B or better on the final paper in SOS 512 Environmental and Resource Economics. This paper, comprising 30% of the course grade, requires students to apply economic modeling to a policy-relevant question of the student's interest.

- Performance criterion 2: SOS 529 Seminar in Environmental and Sustainability Economics

90% or more of students will receive a grade of B or better on presentations in SOS 529.

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

The certificate may be completed in 18-24 months. All coursework used to complete an ASU graduate certificate must be completed within a six year time limit. Students must abide by all policies set forth by Graduate College

and the School of Sustainability. In addition, they must maintain a 3.0 GPA to remain in good standing. Students must complete the certificate program within six years, maintaining continuous enrollment. Students who are deemed unsatisfactory may be recommended to Graduate College for dismissal from the certificate program.

- 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. The certificate allows the sharing of hours based on Graduate College policy and the policy of the programs with which the credits may be shared.

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

Please ensure that all *new 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 Courses			Credit Hours
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
			5
SOS 512	Environmental and Resource Economics	N	3
SOS 529	Research Seminar in Environmental and Sustainability Economics (<i>students take two semesters for 1 credit hour</i>)	Y	2
Electives			Credit Hours
<i>Students will take at least one course in each of the following categories</i>			
(Prefix & Number)	(Course Title)	(New Course?) Yes or No?	(Insert Section Sub-total)
			12
Microeconomic Theory			
<i>One of the following courses in microeconomic theory (or approved equivalent):</i>			
SOS 598	Topic: Microeconomics of Behavior	N	3
*AGB 701	Advanced Agribusiness I	N	3
ECN 510	Microeconomic Theory and Applications	N	3
Statistical and Econometric Modeling			
<i>One of the following courses in microeconomic theory (or approved equivalent):</i>			
SOS 540	Statistical Modeling for Sustainability	N	4
*AGB 702	Advanced Agribusiness II: Applied Econometrics	N	3
*ECN 725	Econometrics I	N	3
PAF 573	Applied Econometrics	N	3
Environmental and Resource Economics			
<i>One of the following courses in microeconomic theory (or approved equivalent):</i>			
SOS 591	Seminar: Climate Change Policy and Economics	N	3

SOS 691	Seminar: Math Natural Resource Economics	N	3
*ECN 741	Public Economics	N	3
*ECN 791	Seminar: Topics in Environmental Economics	N	3
BIO 591	Seminar: The Economics of Conservation	N	3
ESS 513	Institutions	N	4
Modeling and Empirical Methods <i>One of the following courses in microeconomic theory (or approved equivalent):</i>			
*ECN 726	Econometrics II	N	3
*AGB 703	Advanced Agribusiness III: Advanced Empirical Models	N	3
AML 591	Seminar: Modeling with Game Theory	N	3
SOS 591	Seminar: Agent-Based Modeling for Sustainability	N	3
SOS 591	Seminar: Dynamic Modeling of Social and Ecological Systems	N	3
<u>Culminating Experience (if applicable)</u>			<u>Credit Hours</u> (Insert Section Sub-total)
N/A			
Total required credit hours			17

* Note that 700 level coursework is only available to students concurrently admitted to a doctoral program at ASU. This will be monitored internally with the academic unit.

5. PRIMARY FACULTY PARTICIPANTS - 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
Joshua Abbott	Sustainability	Associate Professor
Michael Hanemann	Sustainability/Economics	Professor
Nicolai Kuminoff	Economics	Associate Professor
Timothy Richards	Morrison School of Agribusiness	Professor
Jeff Englin	Morrison School of Agribusiness	Professor
Charles Perrings	School of Life Sciences	Professor
Abigail York	School of Human Evolution and Social Change	Associate Professor
John Martin Anderies	School of Sustainability/School of Human Evolution and Social Change	Professor
Adam Lampert	School of Human Evolution and Social Change	Assistant Professor
Marco Janssen	School of Sustainability	Professor
Bryan Leonard	School of Sustainability	Assistant Professor
Andrew Waxman	School of Public Affairs	Assistant Professor
Lily Hsueh	School of Public Affairs	Assistant 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 B)
- B. Statements of support from all deans and heads of impacted academic units (see Appendix C)

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

DEPARTMENT CHAIR or SCHOOL DIRECTOR (PRINT/TYPE)

SIGNATURE

DATE

DEAN (PRINT/TYPE)

Christopher G. Boone

SIGNATURE



DATE

The following section will be completed by the Graduate College following the recommendations of faculty governance bodies.

DEAN, GRADUATE COLLEGE

SIGNATURE

DATE

Please note: 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

APPENDIX A

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.**

This graduate certificate provides training in the economic theory and methodological tools of environmental and resource economics (ERE). ERE provides an approach to evaluate the consequences and social benefits, and costs of changes to markets and environmental policies. The target audience for this certificate are masters and doctoral students in fields with a sustainability, environmental science, or policy focus including (but not limited to) sustainability, public affairs, biology, environmental social science, applied mathematics, and agribusiness --- where training in ERE may be complementary to research interests or career development.

Breakdown of requirements for the academic catalog:

17 credit hours

Required Core (5 credit hours)

SOS 512 Environmental and Resource Economics (3)

SOS 529 Research Seminar in Environmental and Sustainability Economics (2)

Electives (12 credit hours)

Additional Curriculum Information

Students choose one elective course in each of the following categories: microeconomic theory, statistical and econometric modeling, environmental and resource economics, and modeling and empirical methods.

Students should see the academic unit for a list of approved electives.

2. **Marketing description** (Optional - 50 words maximum. The marketing description should not repeat content found in the program description.)

This graduate certificate provides training in the economic theory and methodological tools of environmental and resource economics (ERE). ERE provides an approach to evaluate the consequences, social benefits, and costs of changes to markets and environmental policies. This will be of interest to students in diverse fields.

3. **Contact and Support Information:**

Office Location (Building & Room): Wrigley Hall, 108	Campus mail code: 5502
Campus Telephone Number: 480-727-6963	Program Director (Name and *ASU ID): Joshua Abbott (jkabbott)
Program email address: SOSGradSunDevil@asu.edu	Program Support Staff (Name and *ASU ID): Katerina Ulmer (kkinast)
Program website address: https://schoolofsustainability.asu.edu/degrees/graduate/	Admissions Contact (Name and *ASU ID): Ivy Gerbis (bohnlein)

* ASU ID (e.g. SHJONES)

4. **Application and iPOS Recommendations:** 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
Ivy Gerbis	X	X

Katerina Ulmer	X	X
Lisa Murphy	X	X

5. Campus(es) where program will be offered: *
- Downtown Tempe
 Online (only) West
 Polytechnic

* **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

6. **Keywords:** (List all keywords that could be used to search for this program. Keywords should be specific to the proposed program.)

Sustainability economics, environmental economics, resource economics, ecological economics

7. **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](#)
- [Interdisciplinary Studies](#)
- [Law & Justice](#)
- [Mathematics](#)
- [Psychology](#)
- [STEM](#)
- [Science](#)
- [Social and Behavioral Sciences](#)
- [Sustainability](#)

(NEW GRADUATE INITIATIVES)**PROPOSAL PROCEDURES CHECKLIST**

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals.

- Establishment of new curricular initiative requests; degrees, concentrations, or certificates
- Rename requests; existing degrees, concentrations or certificates
- Disestablishment requests; existing degrees, concentrations or certificates

Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.

- Additional information can be found at the Provost's Office Curriculum Development website: [Courses link](#)
- For questions regarding proposing new courses, send an email to: courses@asu.edu

Prepare the applicable proposal template and operational appendix for the proposed initiative.

- New degree, concentration and certificate templates (contain proposal template and operational appendix) can be found at the Provost's Office Curriculum Development website: [Academic Programs link](#)

Obtain letters or memos of support or collaboration. (if applicable)

- When resources (faculty or courses) from another academic unit will be utilized
- When other academic units may be impacted by the proposed program request

Obtain the internal reviews/approvals of the academic unit.

- Internal faculty governance review committee(s)
- Academic unit head (e.g. Department Chair or School Director)
- Academic unit Dean (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

Additional Recommendations - All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate Education strongly recommends that academic units establish after the program is approved for implementation.

Set-up a Graduate Faculty Roster for new PhD Programs – This roster will include the faculty eligible to mentor, co-chair or chair dissertations. For more information, please go to http://graduate.asu.edu/graduate_faculty_initiative.

Establish Satisfactory Academic Progress Policies, Processes and Guidelines – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/faculty_staff/policies and scroll down to the **academic progress review and remediation processes** (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

Establish a Graduate Student Handbook for the New Degree Program – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook provided to students when they are admitted to the degree program and published on the website for the new degree gives students this information. Include in the handbook the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and provide a link to the Graduate Policies and Procedures website. Please go to http://graduate.asu.edu/faculty_staff/policies to access Graduate Policies and Procedures.

Appendix B
Sample Plan of Study

Semester	Course	Credits
Semester/Session One	SOS 512: Environmental and Resource Economics	3
	SOS 529: Research Seminar in Environmental and Sustainability Economics	1
Semester/Session Two	Microeconomic Theory Approved Elective	3
	SOS 529: Research Seminar in Environmental and Sustainability Economics	1
	Statistical and Econometric Modeling Approved Elective	3
Semester/Session Three	Environmental and Resource Economics Approved Elective	3
	Modeling and Empirical Methods Approved Elective	3
TOTAL		17

APPENDIX C
Letters of Support

School of Sustainability - Official Submission

From: Caroline Harrison [<mailto:Caroline.Harrison@asu.edu>]
Sent: Wednesday, May 17, 2017 9:33 AM
To: 'curriculumplanning@asu.edu'
Cc: Amanda Morales-Calderon; Eric Wertheimer
Subject: Proposal to establish Graduate Certificate Environmental and Sustainability Economics

Attached is our proposal to establish a **Graduate Certificate in Environmental and Sustainability Economics**. The pdf includes Dean Chris Boone's signature and the letters of support. I have also included a Word version of the proposal portion for any comments or edits.

Please let me know if you have any questions or need anything else.

Thanks.

Caroline J. Harrison, PhD

Curricular and Academic Programs

Arizona State University

P.O. Box 875502 | Tempe, Arizona | 85287-5502

PH: 480-965-8645 | Main: 480-965-2975

SchoolOfSustainability.asu.edu

School of Human Evolution and Social Change – Support

From: Kaye Reed <kaye.reed
Date: Tuesday, May 16, 2017 at 10:58 AM
To: Elizabeth Wentz <WENTZ@asu.edu>
Subject: Re: Grad Certificate in Environmental and Sustainability Economics

Dear Libby,

The Graduate Certificate in Environmental and Sustainability Economics will likely be of interest to some of our PhD students in Environmental Social Science. I see the certificate as an added benefit to that degree program in SHESC, rather than a competing program.

Please let me know if you require further evaluation.

Best,
Kaye

--

Kaye E. Reed
President's Professor
Director, School of Human Evolution and Social Change
and
Research Associate
Institute of Human
Origins
P.O. Box 874101
Arizona State
University Tempe, AZ
85287-4101
(480) 727-6538

2

<http://www.kayereed.com>

From: Elizabeth Wentz <WENTZ@asu.edu>
Date: Tuesday, May 16, 2017 at 10:14
To: Kaye Reed <kaye.reed@asu.edu>
Subject: FW: Grad Certificate in Environmental and Sustainability Economics

Dear Kaye,

Could you review the attached proposal and provide me with an impact statement?

Thank you.

College of Liberal Arts and Sciences – Support
Dean of Natural Sciences

From: Patrick Kenney <pkenney@asu.edu>
Date: Tuesday, May 16, 2017 at 12:04 PM
To: Christopher Boone <Christopher.G.Boone@asu.edu>
Subject: FW: Grad Certificate in Environmental and Sustainability Economics

See below from Ferran. Pat

Patrick J. Kenney
Dean, College of Liberal Arts and Sciences
Foundation Professor, School of Politics and Global Studies
Arizona State University

From: Ferran Garcia-Pichel
Sent: Tuesday, May 16, 2017 10:16 AM
To: Patrick Kenney <pkenney@asu.edu>; Elizabeth Wentz <WENTZ@asu.edu>
Subject: Re: Grad Certificate in Environmental and Sustainability Economics
I did answer I was OK with this.
Ferran

From: Patrick Kenney <pkenney@asu.edu>
Date: Tuesday, May 16, 2017 at 9:58 AM
To: Ferran <ferran@asu.edu>, Elizabeth Wentz <WENTZ@asu.edu>
Subject: FW: Grad Certificate in Environmental and Sustainability Economics
FYI

Patrick J. Kenney
Dean, College of Liberal Arts and Sciences
Foundation Professor, School of Politics and Global Studies
Arizona State University

From: Christopher Boone
Sent: Tuesday, May 16, 2017 9:31 AM

2

To: Patrick Kenney <pkenney@asu.edu>
Subject: FW: Grad Certificate in Environmental and Sustainability Economics

Hi Pat,

I believe we are still waiting for a letter of support from CLAS for the Graduate Certificate in Environmental and Sustainability Economics. Have you heard back from SHESC, SOLS, and Applied Math?

Thanks, Chris

Christopher
Boone Dean and
Professor School
of Sustainability

Arizona State
University
Executive Assistant: Lorrio@asu.edu

W. P. Carey School of Business

From: Amy Hillman

Sent: Friday, March 31, 2017 9:07:03 AM

To: Christopher Boone

Cc: Kay Faris

Subject: Re: Graduate Certificate in Environmental and Sustainability Economics

Hi Chris,

The W. P. Carey School of Business has no objections to and will support in any way needed the Graduate Certificate in Environmental and Sustainability Economics.

Amy

Amy J. Hillman, PhD

Dean and Rusty Lyon Chair of Strategy

W. P. Carey School of Business


Arizona State University

480.965.3402 | amy.hillman@asu.edu

College of Public Service and Community Solutions



April 3, 2017

To: Christopher Boone, Dean, School of Sustainability
From: Kathleen Andereck, Director of Curricular Initiatives 
Subject: Support for Environmental and Sustainability Economics

The College of Public Service & Community Solutions offers our support for the proposed graduate certificate in Environmental and Sustainability Economics.