ARIZONA STATE UNIVERSITY PROPOSAL TO ESTABLISH A NEW GRADUATE DEGREE

This template is to be used only by programs that have received specific written approval from the Provost's office to proceed with internal proposal development and review. A separate proposal must be submitted for each individual new degree program.

DEGREE PROGRAM

College/School(s) offering this degree: School of Sustainability

Unit(s) within college/school responsible for program: School of Sustainability

If this is for an official joint degree program, list all units and colleges/schools that will be involved in offering the degree program and providing the necessary resources:

Master's Degree Name: Masters in Sustainable Solutions (MSUS) in Sustainable Solutions

Master's Degree Type: Other

If Degree Type is Other, provide proposed degree type: Masters in Sustainable Solutions

and proposed abbreviation: MSUS

Proposed title of major: Sustainable Solutions

Is a program fee required? Yes 🗌 🛛 No 🖂

Requested effective term: Fall and year: 2012

(The first semester and year for which students may begin applying to the program)

PROPOSAL CONTACT INFORMATION

(Person to contact regarding this proposal)

Name: Christopher G. Boone, Ph.D.

Title: Associate Dean for Education

Phone: 480-965-2976

email: cgboone@asu.edu

DEAN APPROVAL

This proposal has been approved by all necessary unit and College/School levels of review, and the College/School(s) has the resources to offer this degree program. I recommend implementation of the proposed degree program. (*Note: An electronic signature, an email from the dean or dean's designee, or a PDF of the signed signature page is acceptable.*)

College Dean name: Sander Va	n Der Leeuw, Ph.D.
(Plea	e see attached submission to Curriculum Planning account)
College Dean signature	Date:
College Dean name:	
(if more than one college involved)	

College Dean signature _

Date:

ARIZONA STATE UNIVERSITY PROPOSAL TO ESTABLISH A NEW GRADUATE DEGREE

This proposal template should be completed in full and submitted to the University Provost's Office [mail to: curriculumplanning@asu.edu]. It must undergo all internal university review and approval steps including those at the unit, college, and university levels. A program <u>may not</u> be implemented until the Provost's Office notifies the academic unit that the program may be offered.

DEGREE PROGRAM INFORMATION

If Degree Type is Other, provide proposed degree type: Masters in Sustainable Solutions and proposed abbreviation: MSUS

Proposed title of major: Sustainable Solutions

1. PURPOSE AND NATURE OF PROGRAM

A. Brief program description (This is a catalog type description of no more than 250 words. Include the distinctive features of the program that make it unique. Do not include program or admission requirements.)

The Masters in Sustainable Solutions program is designed to prepare students for careers in sustainability and related fields. Beginning with a foundation in sustainability theory and methods, the program allows students to specialize in one of four tracks:

- 1. Policy and Administration
- 2. Nonprofit Organization
- 3. Technology and Society
- 4. International Development

A key objective is to learn how to apply sustainability principles and approaches to career fields that address complex human and environmental challenges. Students are encouraged to complete a sustainability-related internship as a capstone, but may also choose a workshop or applied project. Each of these options is designed to engage students with real-world applications of sustainability and to develop problem-solving skills.

B. Total credit hours required for the program: 33

- C. Are any concentrations to be established under this degree program?
 Yes No
- 2. **PROGRAM NEED.** Explain why the university needs to offer this program (include data and discussion of the target audience and market).

There is growing knowledge on what the pursuit of a sustainable future requires. This knowledge can increasingly be translated into an evolving suite of content areas and competencies any organization can gain from in order to become more sustainable. Current institutions—be they commercial enterprise, non-governmental organizations (NGOs), governmental or other—are typically deeply embedded in and structured around today's existing unsustainable paradigms. In order to move organizations towards more sustainable future, students in the Masters in Sustainable Solutions program will acquire knowledge and skills in at least five broad competencies: systems thinking, normative, anticipatory, strategic, and interpersonal competencies. The acquisition of each of these competencies will be supported by tailored learning outcomes and problem and project-based learning experiences. Given the transitional reality graduates will face with respect to today's existing institutions and the broader emerging requirements of sustainability success, graduates must be able

to develop, lead and manage sustainability efforts in multiple institutional contexts, from compliancedriven "business as usual" to deeply committed "change society for a sustainable future"¹.

Demand for a more applied master's program is also evident in application numbers to the current, more academic master's programs through the School of Sustainability. Each year, many good candidates are denied admission to the MA or MS in Sustainability, which is a very competitive program that has a limited number of seats in the program (see chart below). The majority of students denied from the MA or MS program, which is more academic in nature and is viewed as a gateway to the PhD in Sustainability would be eligible for the proposed Master's in Sustainable Solutions program, which is viewed as more of an applied, terminal master's program.

	Fall 2007	Fall 2008	Fall 2009	Fall 2010	Fall 2011
MA/MS Applications	35	97	165	131	128
MA/MS Applications Admitted	13	28	25	23	30
MA/MS Applications Denied	22	69	140	108	98

Sustainability degree programs are new options for students and more organizations are recognizing the need for trained professionals in sustainability. The number of sustainability programs listed on the resources page of the Association for the Advancement of Sustainability in Higher Education's web site has grown dramatically since its inception in 2006 and since Arizona State University first launched the School of Sustainability and some of the first sustainability programs in the nation in 2007.

3. **IMPACT ON OTHER PROGRAMS.** List other academic units that might be impacted by the proposed program and describe the potential impact (e.g., how the implementation of this program might affect student headcount/enrollment, student recruitment, faculty participation, course content, etc. in other programs). Attach letters of collaboration/support from impacted programs.

The School of Sustainability will work closely with the School of Human Evolution and Social Change as well as the School of Geographical Sciences and Urban Planning for their courses that are listed as core courses. The School will also work closely with the following academic units to project and prepare for enrollment in the courses that students will take in their units for their track.

- 1) Policy and Administration Track:
 - School of Public Affairs (for PAF courses)
 - School of Human Evolution and Social Change (for ESS course)
- 2) Nonprofit Organization Track:
 - School of Community Resources and Development (for NLM courses)
- 3) Technology and Society Track:
 - Department of Applied Sciences and Mathematics (for ETM courses)
 - Ira A. Fulton Schools of Engineering (for FSE courses)
 - School of Geographical Sciences and Urban Planning (for PUP course)
- 4) International Development
 - School of Human Evolution and Social Change (for ASB course)
 - Department of Applied Sciences and Mathematics (for ETM course)
 - School of Life Sciences (for HPS course)
 - School of Social Transformation (for JUS course)
 - School of Geographical Sciences and Urban Planning (for PUP course)
- 4. **PROJECTED ENROLLMENT** How many new students do you anticipate enrolling in this program each year for the next five years? Please note, The Arizona Board of Regents (ABOR) requires nine masters and six doctoral degrees be awarded every three years. Thus, the projected enrollment numbers must account for this ABOR requirement.

¹ Basile, G. (2011). *Sustainability Success Today & Tomorrow for Sustainability Graduates*. SOS Curriculum Working Group white paper.

5-YEAR PROJECTED ANNUAL ENROLLMENT					
Please utilize the following tabular format.	1 st Year	2 nd Year (Yr 1 continuing + new entering)	3rd Year (Yr 1 & 2 continuing + new entering)	4 th Year (Yrs 1, 2, 3 continuing + new entering)	5 th Year (Yrs 1, 2, 3, 4 continuing + new entering)
Number of Students Majoring (Headcount)	25	50	100	150	200

5. STUDENT LEARNING OUTCOMES AND ASSESMENT

A. List the knowledge, competencies, and skills students should have when they graduate from the proposed degree program. (You can find examples of program Learning Outcomes at (<u>http://www.asu.edu/oue/assessment.html</u>).

Graduates will be able to think in a holistic way about different types of sustainability problems using a dynamic systems framework.² They will have the technical skills to formulate and solve problems at the appropriate scale, and the breadth of vision to recognize the interconnectedness of coupled social and environmental systems. Students will develop their skills related to the following five competencies that are necessary for developing sustainable solutions:

- 1) <u>Systems thinking competence</u> students will master one or more approaches for complex system analysis and complex problem analysis (from multiple perspectives).
- 2) <u>Anticipatory competence</u> students will be well-versed in theory and application or futureoriented knowledge and methods in both science and policy decision-making.
- <u>Normative competence</u> students will be able to identify, analyze and constructively address the underlying values, belief structures, and normative elements that influence problem perception and problem-solving.
- <u>Strategic competence</u> students will display the ability to identify and synthesize contributions of distinct knowledge bases in the design of solution options (transition and intervention strategies) and implementation.
- 5) <u>Interpersonal competence</u> students will be familiar with theories and approaches to knowledge co-production and participatory approaches to research and decision-making; have engaged in practical experience of sustainability problem solving with diverse academic and non-academic partners.

More specifically, throughout the program, it is expected that students will learn about:

Sustainability principles, philosophy, and ethics, including:

- Key principles of sustainability;
- Concepts related to sustainability: resilience, justice, intergenerational equity, etc.;
- Systematic failure and misbalance between systems complexity vs. cognitive and organizational capacity; and
- Environmental to sustainability ethics.

Practical sustainability concepts and methods, including:

- An introduction to problem-solving methodology;
- Practical system analysis both quantitative and qualitative approaches (e.g., modeling, conceptual mapping, institutional analysis, and governance analysis);
- Thinking in a structured way about the future simulation and forecasting, scenario analysis, and visioning; and

² Wiek, A., Eakin, H. (2011). *School of Sustainability Graduate Curriculum Revision – Feedback/Input.*. SOS Curriculum Working Group white paper.

 Assessing sustainability – using multi-criteria assessment, LCA, MFA, AIA, assessment of sectors branches and companies, and assessment of nationals regions cities, neighborhoods, and buildings.

Decision-making theory, approaches and tools, including:

- Descriptive theory of decision making in policy, administration, and business looking at context, framing, and structures in decision making as well as decision making processes and decision outcomes;
- Approaches of decision support applied science, consulting work, and collaborative decision-making;
- Organizations of decision support advising administrations (e.g., EPA), international panels (e.g., IPCC), extension centers, and boundary organizations; and
- Tools of decision support multi-criteria assessment of decision options, intervention research methodology, evaluation and program design methodology, policy assessment, and visualization and decision support.

Community engagement and participatory research, including:

- Theory of community engagement community challenges, purpose of community engagement, history of community engagement, and inter-cultural comparison of community engagement;
- Paradigms of community engagement action research, marketing research, and participatory research; and
- Methods of community engagement functional typology of participatory settings, basics of collaboration, communication and facilitation, setting an objective, involving the community, working with the community, capacity building tools, and following up after completion (participatory evaluation).

Students in this program will also gain real-world experience using what they have learned as they develop solutions to real problems in class as well as in their capstone experience via an internship, applied project, or workshop.

B. Describe the plan and methods to assess whether students have achieved the knowledge, competencies and skills identified in the Learning Outcomes. (You can find examples of assessment methods at (http://www.asu.edu/oue/assessment.html).

The School works with the University Office of Evaluation and Educational Effectiveness to document program effectiveness and will use multiple methods to assess the program and learning outcomes, including:

- Regularly reviewing course evaluations each semester;
- Utilizing survey results conducted by departments with the university (e.g., Graduate Student Report Card);
- Working with instructors to analyze work and assignments completed in class; and
- Working with faculty and internship providers to assess learning outcomes displayed in students' capstone experience.
- 6. ACCREDITATION OR LICENSING REQUIREMENTS (if applicable). Provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.

Not Applicable

7. FACULTY, STAFF AND RESOURCE REQUIREMENTS A. Faculty

i. **Current Faculty.** List the name, rank, highest degree, area of specialization/expertise and estimate of the level of involvement of all current faculty who will teach in the program.

Courses for the proposed Masters in Sustainable Solutions program will be taught by School of Sustainability teaching faculty <u>http://schoolofsustainability.asu.edu/people/faculty.php</u> who

are either appointed to the School in whole or part or affiliated with the School. The School may also work with other departments to draw from the expertise of Sustainability Scientists and Scholars <u>http://schoolofsustainability.asu.edu/people/scientists-and-scholars.php</u> for courses.

ii. New Faculty. Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty.

The School is currently hiring three new tenure track faculty and it is not expected that additional faculty will be necessary to implement this program for the first three years. It is expected that some faculty associates will be hired to teach or co-teach some courses using existing financial resources.

iii. Administration of the program. Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

The School will utilize the administrative structure of the current MA/MS and PhD program for administration of the Masters in Sustainable Solutions program. The School's Graduate Committee will provide oversight of admissions, advising, and course offerings. The School's Academic Advising Center will assist the committee and provide support. Key faculty and staff members who will be most impacted by the addition of this program are:

Dr. Hallie Eakin, Graduate Chair (providing oversight of the program) Lisa Murphy, Program Development Specialist (assisting with oversight and implementation) Kelly MacCleary, Graduate Academic Success Specialist (coordination of the program) Rebecca Folk, Coordinator Sr. (supporting admissions and correspondence) Laura Gossman, Office Specialist Sr. (supporting admissions and correspondence) Student Workers (supporting clerical duties)

B . Resource requirements to launch and sustain the program. Describe any new resources required for this program's success such as new staff, new facilities, new library resources, new technology resources, etc

In its first year, the program will not require any new resources. If the program grows as projected, in the second or third year, additional staff resources will be required to administer the program. Our present graduate academic success specialist is responsible for approximately 90 students. Once the enrollment for this program reaches 50 students (in addition to the existing graduate student population of 90-100), the school will require another half-time appointment. Once it reaches 75-80 students, the school will require a second full-time graduate academic success specialist.

8. CURRICULAR STRUCTURE OF THE PROPOSED PROGRAM

- **A.** Admission Requirements The requirements listed below are Graduate College requirements. Please modify and/or expand if the proposed degree has additional admissions requirements.
 - i. **Degree.** Minimum of a bachelor's degree (*or equivalent*) or a graduate degree from a regionally accredited College or University of recognized standing in a related field such as

The program is open to considering any field, since sustainability is an interdisciplinary field.

Modify or expand, if applicable:

ii. 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 Modify or expand, if applicable:

Not applicable – we will use the Graduate College requirement.

iii. English Proficiency Requirement for International Applicants. If applicable list any English proficiency requirements that are higher than and/or in addition to the Graduate College requirement. (See Graduate College website <u>http://graduate.asu.edu/admissions/international/english_proficiency</u>):

Not applicable - we will use the Graduate College requirement.

iv. Required Admission Examinations.

GRE GMAT Millers Analogies None Required

- v. Application Review Terms. Indicate all terms for which applications for admissions are accepted and the corresponding application deadline dates, if any:
 - Fall Deadline (month/year): December 15th
 - Spring Deadline (month/year): September 15th
 - Summer Deadline (month/year):
- **B.** Degree Requirements. Below provide the curricular requirements for the proposed degree program.
 - i. Total credit hours (cr hrs) required for the degree program: 33
 - **ii. Core courses.** List all required core courses and total credit hours for the core (required courses other than internships, thesis, dissertation, capstone course, etc). Omnibus number courses cannot be used as core courses. Permanent numbers must be requested by submitting course proposal to ACRES for approval.

	I cr hrs for required core courses: <u>30 credit hours</u>		
Course	Course title	Credit	New
prefix &		hours	course?
number			
Students mu	ust take the following 2 core courses (6 credit hours):		
SOS 510	Perspectives on Sustainability	3	Y 🗌 N 🖾
SOS 511	Methodology of Sustainability Research and Problem Solving	3	Y 🗌 N 🖂
Students m	ust take 4 foundational courses (12 credit hours) from the followin	ig list:	
SOS 512	Sustainable Resource Allocation	3	Y 🗌 N 🖾
SOS 513	Science for Sustainability	3	Y 🗌 N 🖾
SOS 514	Human Dimensions of Sustainability	3	Y 🗌 N 🖂
SOS 530	International Development and Sustainability	3	Y 🗌 N 🖂
SOS 535	Sustainable Ecosystems	3	Y 🗌 N 🖂
SOS 591	Topic: Uncertainty and Decision Making	3	Y 🗌 N 🖂
SOS 591	Topic: Sustainability and Enterprise	3	Y 🗌 N 🖂
Students m	ust take 2 methods courses (5 credit hours min.) from the followir	ng list:	
SOS 540	Statistical Modeling for Sustainability	3	Y 🗌 N 🖾
SOS 598	Topic: Survey Analysis in Sustainability	3	Y 🗌 N 🖂
SOS 598	Topic: Life Cycle Assessments for Civil Systems	3	Y 🗌 N 🖂
ASB 500	Topic: Ethnographic Field Methods	3	Y 🗌 N 🖂
PUP 570	GIS for Planners	2	Y 🗌 N 🖂
PUP 573	Survey Research and Multivariate Statistics	2	Y 🗌 N 🖂
Students m	ust choose a track and select 2 courses (6 credit hours) from the	track (these	are noted
under electi	ves below)		
Tracks incl	ude: Policy and Administration, Nonprofit Organization, Technolog	y and Socie	ty, and
Internation	al Development.		
Students m	ust take a career preparation course (1 credit hour):		
SOS 598	Career Preparation (proposed omnibus number SOS 580)	1	Y 🛛 N 🗌
	(Please expand table as needed. Right click in white space of last cell. Se	lect "Insert Ro	ws Below")

Total cr hrs for required core courses: 30 credit hours

iii. Elective Courses (Track area options)

Total cr hrs for program electives:

Provide a sample list of elective courses:

Course	de a sample list of elective courses:	Credit	New
prefix &		hours	course?
number			
Policy and A	dministration	1	
PAF 503	Public Affairs	3	Y N N
PAF 504	Public Affairs Economics	3	Y 🗌 N 🖂
PAF 505	Public Policy Analysis	3	Y 🗌 N 🖂
PAF 506	Public Budgeting and Finance	3	Y 🗌 N 🖂
PAF 508	Organization Behavior	3	Y 🗌 N 🖂
PAF 546	Environmental Policy and Management	3	Y 🗌 N 🖂
ESS 513	Institutions	3	Y 🗌 N 🖂
Nonprofit Or			
NLM 510	Foundations in Nonprofit Management	3	Y 🗌 N 🖂
NLM 520	Financial Management in Nonprofit Organizations	3	Y 🗌 N 🖂
NLM 540	Human Resources in Nonprofit Organizations	3	Y 🗌 N 🖂
NLM 550	Philanthropy: Theory and Practice	3	Y 🗌 N 🖾
NLM 560	Leadership and Ethics in Nonprofit Organizations	3	Y 🗌 N 🖂
NLM 562	Social Entrepreneurship	3	Y 🗌 N 🖾
Technology	and Society		
SOS 504	Energy and the Built Environment	3	Y 🗌 N 🖂
SOS 515	Industrial Ecology and Design for Sustainability	3	Y 🗌 N 🖂
SOS 552	Advanced Earth Systems Engineering and Management	3	Y 🗌 N 🖾
ETM 502	Regulatory Framework for Toxic and Hazardous Substances	3	Y 🗌 N 🖾
ETM 527	Environmental/Resources Regulations Concepts	3	Y 🗌 N 🖾
FSE 501	Technology Entrepreneurship	3	Y 🗌 N 🖂
PUP 575	Environmental Impact Assessment	2	Y 🗌 N 🖂
	Development	-	
SOS 532	Sustainable Urban Dynamics	3	Y 🗌 N 🔀
SOS 536	Food System Sustainability	3	Y 🗌 N 🖂
ASB 529	Culture and Political Economy	3	Y 🗌 N 🖂
ETM 528	International Environmental Management	3	Y 🗌 N 🖂
NLM 570	International NGOs	3	Y 🗌 N 🖂
PUP 515	International Planning and Development	3	Y 🗌 N 🖂
TDM 570	Sustainable Tourism	3	Y 🗌 N 🖂

(Please expand table as needed. Right click in white space of last cell. Select "Insert Rows Below")

- iv. **400-Level Courses.** No more than 6 credit hours of 400-level coursework can be included on graduate student program of study.
 - 1. Are 400-level ASU courses allowed on student program of study for this degree? □ Yes ⊠ No
- v. Additional Requirements (if applicable). Provide a brief description of any additional requirements (e.g. internships, clinicals, field study, etc.)
- vi. Total cr hrs required for research (if applicable):
- vii. Culminating experience for the proposed program (please check all that apply and provide requested information):

	Brief description of the applied project or	Course prefix	Credit
Required?	the capstone course, as applicable.	and number	hours

Thesis (master's only)		6 cr hrs
Applied Project (master's only)	See below – there are 3 options students can pursue for capstone experience	
Capstone course (master's only)	See below – there are 3 options students can pursue for capstone experience	
Dissertation (doctoral only)	·	12 cr hrs

(Please expand table as needed. Right click in white space of last cell. Select "Insert Rows Below")

Students must complete only <u>one</u> of the following capstone experiences (3 credit hours):			
			New course?
SOS 584	Internship	3	Y 🗌 N 🖂
SOS 593	Applied Project	3	Y 🗌 N 🖾
SOS 594	Workshop	3	Y 🗌 N 🖂

viii. If applicable, provide the following information about any concentration(s) associated with this degree program. Please attach a sample program of study with timeline for each concentration listed below.

- I. Concentration name: not applicable
- ix. Master's program comprehensive exams, please check all that apply (Please note: for doctoral programs, a written and an oral comprehensive exam are required.)

(Written comprehensive exam is required)

- Oral comprehensive exam is required
- No oral comprehensive exam required
- **x. Committee:** Required Number of Thesis or Dissertation Committee Members (must be at least 3 including chair or co-chairs): One faculty advisor.

xi. Foreign Language Exam.

Foreign Language Examination(s) required? \Box Yes \boxtimes No

If yes, list all foreign languages required:

- xii. Course Prefix(es) Provide the following information for the proposed graduate program.
 - a. Will a new course prefix(es) be required for this degree program? Yes □ No ⊠
 - **b.** If yes, complete the <u>Course Prefixes / Subjects Form</u> for each new prefix and submit it as part of this proposal submission.
- xiii. New Courses Required for Proposed Degree Program. Provide course prefix, number, title, and credit hours and description for any new courses required for this degree program.

There is only one new core course that will need to be developed for the proposed program.

SOS 580 (proposed number): Career Preparation – 1 credit hour

The need for sustainability-minded workers and leaders has never been more important than right now. Yet Sustainability as a career track is still very new and means different things to different people. Students will discuss how to prepare for a fulfilling and rewarding sustainability career. They will be challenged to explore their own ambitions and 'personal brands', to shape their work personas, to model the behaviors and competencies that will help them build long-term career success, and to uncover the sustainability potential of any job - whether or not 'sustainability' is in the job title.

From: Lisa Murphy [mailto:Lisa.M.Murphy@asu.edu]
Sent: Friday, March 09, 2012 11:30 AM
To: curriculumplanning@asu.edu
Cc: Sander Van Der Leeuw; Christopher Boone; Hallie Eakin; Kelly Maccleary
Subject: Masters in Sustainable Solutions Proposal

Dear Dean Allison and Vice Provost Corey,

Attached you will find a curriculum proposal from the School of Sustainability for the Masters in Sustainable Solutions program. Along with the proposal, you will find statements of support from collaborating units.

Please let us know if you need anything additional in order to consider the implementation of this new program (which we would like to see available to students as early as fall 2012).

Thank you,

Lisa Murphy

Program Development Specialist School of Sustainability PO Box 875502 Arizona State University Tempe, AZ 85287-5502 Phone: (480) 965-7255 Fax: (480) 727-9902

Lisa.M.Murphy@asu.edu http://sustainability.asu.edu Christopher G. Boone Professor and Associate Dean for Education School of Sustainability Professor, School of Human Evolution & Social Change Arizona State University http://cgboone.personal.asu.edu

------ Forwarded message ------From: **Paul LePore** <<u>Paul.Lepore@asu.edu</u>> Date: Fri, Feb 10, 2012 at 8:57 AM Subject: Letter of Support -- Masters in Sustainable Solutions (MSS) To: Sander Van Der Leeuw <<u>vanderle@asu.edu</u>>, Christopher Boone <<u>Christopher.G.Boone@asu.edu</u>> Cc: Paul LePore <<u>Paul.Lepore@asu.edu</u>>, Jenny Smith <<u>jenny.smith@asu.edu</u>>, Robert Page <<u>Robert.Page@asu.edu</u>>

Dear Professors Van Der Leeuw and Boone,

The College of Liberal Arts and Sciences has reviewed your new proposal for a Master's Degree in Sustainable Solutions (MSS).

This applied master's program meets a growing need for trained professionals in the area of sustainability. The curriculum is well designed and draws its expertise from across the ASU campus. Our college wholeheartedly supports this proposal and looks forward to working with you and your colleagues in launching this important new degree.

Sincerely,

Paul LePore

PAUL C. LEPORE, Ph.D. Associate Dean College of Liberal Arts and Sciences Foundation Building, Suite 110

Arizona State University | P.O. Box 876605 | Tempe, Arizona 85287-6605 <u>480.965.6506</u> | Fax: <u>480.965.2110</u> | e-mail: <u>paul.lepore@asu.edu</u>

ASU College of Liberal Arts and Sciences — Transforming learning, discovery and lives

Jonathan,

Thanks very much for the statement of support.

Chris Christopher G. Boone Professor and Associate Dean for Education School of Sustainability Professor, School of Human Evolution & Social Change Arizona State University http://cgboone.personal.asu.edu

On Thu, Feb 23, 2012 at 12:46 AM, Jonathan Koppell <<u>koppell@asu.edu</u>> wrote:

Chris

In case you don't recover my other email.

I am fully supportive of the Master of Sustainable Solutions proposal and believe it will prove a valuable addition to ASU offerings.

Sincerely,

Jonathan Koppell

Dean, College of Public Programs

From: Christopher Boone [mailto:cgboone@asu.edu]
Sent: Wednesday, February 22, 2012 1:58 PM
To: Jonathan Koppell
Cc: Sander Van Der Leeuw
Subject: URGENT: statement for new Master of Sustainable Solutions proposal

Dear Jonathan,

Sander asked me to follow up with you about a statement regarding the Master's of Sustainable Solutions proposal. We need to submit the proposal by this **Monday, February 27** at the latest for it to be considered by the graduate college and university curriculum committee. This has been a very busy week at GIOS, so please forgive me if you have already submitted a statement.

Thanks,

Chris

Christopher G. Boone Professor and Associate Dean for Education School of Sustainability

Professor, School of Human Evolution & Social Change Arizona State University <u>http://cgboone.personal.asu.edu</u>

On Mon, Feb 6, 2012 at 5:23 PM, Sander Van Der Leeuw <<u>vanderle@asu.edu</u>> wrote:

Dear Jonathan,

The School of Sustainability has developed a proposal for a new Master of Sustainable Solutions (see attached). This degree is a modification of our existing master's degrees with a special focus on **applications** of sustainability principles to germane knowledge domains. For the moment, it contains five tracks: (i) policy and administration; (ii) nonprofit organization; (iii) business management; (iv) engineering; and (v) international development. Requirements for the degree include a choice of courses in your unit. I welcome any other suggestions for applicable course offerings.

I am writing to ask for a letter of support and an impact statement from you for our proposed degree. Over the last couple of years, I have worked with many units across all four campuses to ensure that sustainability education extends well beyond the School of Sustainability. With your participation, this degree will provide excellent preparation for students and continue the effort to incorporate broad perspectives, knowledge, and methods into sustainability education at ASU. I would appreciate your timely feedback before the end of this week.

Sincerely,

Sander

From:	Christopher Boone
To:	Lisa Murphy
Subject:	Fwd: URGENT: statement for new Master of Sustainable Solutions proposal
Date:	Thursday, February 23, 2012 4:21:14 PM

Please change the name of engineering track to "Technology and Society". Christopher G. Boone Professor and Associate Dean for Education School of Sustainability Professor, School of Human Evolution & Social Change Arizona State University http://cgboone.personal.asu.edu

------ Forwarded message ------From: **Sander Van Der Leeuw** <<u>vanderle@asu.edu</u>> Date: Thu, Feb 23, 2012 at 10:44 AM Subject: Re: URGENT: statement for new Master of Sustainable Solutions proposal To: Christopher Boone <<u>cgboone@asu.edu</u>>

Technology and Society, of Paul insists, Technology and Sustainability are fine. This is only a track name, not a degree name.

Sander van der Leeuw Dean, School of Sustainability Co-Chair, Complex Adaptive Systems Initiative Arizona State University 800 S. Cady Mall P.O. Box 875402 Tempe AZ 85287-5402 Telephone: <u>+1 480 965 6214</u> Fax: <u>+1 480 965 8087</u> vanderle@asu.edu

From: Chris Boone <<u>cgboone@asu.edu</u>> Date: Thu, 23 Feb 2012 09:09:54 -0700 To: Sander Van Der Leeuw <<u>vanderle@asu.edu</u>> **Cc:** Lisa Murphy <<u>Lisa.M.Murphy@asu.edu</u>> **Subject:** Fwd: URGENT: statement for new Master of Sustainable Solutions proposal

Sander,

Should we change the name of the track to "Technology" as per Paul's suggestion? Or how about "Technology and Society"?

Chris Christopher G. Boone Professor and Associate Dean for Education School of Sustainability Professor, School of Human Evolution & Social Change Arizona State University http://cgboone.personal.asu.edu

------ Forwarded message ------From: **Paul Johnson** <<u>PAUL.C.JOHNSON@asu.edu</u>> Date: Thu, Feb 23, 2012 at 5:36 AM Subject: RE: URGENT: statement for new Master of Sustainable Solutions proposal To: Christopher Boone <<u>cgboone@asu.edu</u>> Cc: Sander Van Der Leeuw <<u>vanderle@asu.edu</u>>

Hi Chris and Sander -

I passed it around to some folks in Engineering a couple of weeks ago. They were generally supportive, but there was concern over the name of the one track being "engineering". None of the other track names are recognizable existing degree program or profession names like "engineering".

To be consistent with the naming of the other tracks and the same content, would you consider changing that one track name to "technology" or something else to

better reflect the content and avoid confusion about it being an engineering degree?

Thanks!

PCJ

From: Christopher Boone [cgboone@asu.edu] Sent: Wednesday, February 22, 2012 2:01 PM To: Paul Johnson Cc: Sander Van Der Leeuw Subject: URGENT: statement for new Master of Sustainable Solutions proposal

Dear Paul,

Sander asked me to follow up with you about a statement regarding the Master's of Sustainable Solutions proposal. We need to submit the proposal by this Monday, February 27 at the latest for it to be considered by the graduate college and university curriculum committee. This has been a very busy week at GIOS, so please forgive me if you have already submitted a statement.

Thanks, Chris

Christopher G. Boone Professor and Associate Dean for Education School of Sustainability Professor, School of Human Evolution & Social Change Arizona State University http://cgboone.personal.asu.edu

On Mon, Feb 6, 2012 at 5:23 PM, Sander Van Der Leeuw <<u>vanderle@asu.edu</u><mailto:<u>vanderle@asu.edu</u>>> wrote:

Dear Paul,

The School of Sustainability has developed a proposal for a new Master of Sustainable Solutions (see attached). This degree is a modification of our existing master's degrees with a special focus on applications of sustainability principles to germane knowledge domains. For the moment, it contains five tracks: (i) policy and administration; (ii) non-profit organization; (iii) business management; (iv) engineering; and (v) international development. Requirements for the degree include a choice of courses in your unit. I welcome any other suggestions for applicable course offerings.

I am writing to ask for a letter of support and an impact statement from you for our proposed degree. Over the last couple of years, I have worked with many units across all four campuses to ensure that sustainability education extends well beyond the School of Sustainability. With your participation, this degree will provide excellent preparation for students and continue the effort to incorporate broad perspectives, knowledge, and methods into sustainability education at ASU. I would appreciate your timely feedback before the end of this week.

Sincerely, Sander