

Brothers, Sheila C.

From: Cramer, Aaron M.
Sent: Thursday, October 10, 2019 9:06 AM
To: Bird-Pollan, Jennifer; Brothers, Sheila C.
Cc: Ehrkamp, Patricia; Harmon, Camille; Bosch, Anna R.
Subject: NEW MA: Applied Environmental and Sustainability Studies
Attachments: MA in Applied Environmental and Sustainability, updated 10_7, 2019.pdf

Proposed New MA in Applied Environmental and Sustainability Studies

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new MA degree: Applied Environmental and Sustainability Studies, in the Department of Geography within the College of Arts and Sciences.

Rationale: The proposed master's program will prepare students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. The interdisciplinary structure of the program encourages a liberal arts approach that combines academic knowledge in environmental issues with critical thinking, independent learning, oral and written communication, and problem solving. The proposed curriculum, which will be offered online, consists of core, skills, and elective courses as well as a capstone or internship experience. Surveying indicates that there is strong demand for a graduate program in this area by currently enrolled undergraduate students in this area. Anticipated enrollment of 10 to 15 students is expected.

Aaron

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Office of Strategic Planning and Institutional Effectiveness (OSPIE). The new program approval process begins when a contact person submits a "Notification of Intent" (NOI) and substantive change checklist (available [HERE](#)) to OSPIE. Units have six months from the point of NOI submission to the time when the completed proposal is approved by Senate. After the NOI is submitted, a contact person should begin working to complete this form. Contact persons should work with OSPIE to identify the program's degree designation and CIP, as well as to solicit a letter of administrative feasibility from the Provost (per SR 3.2.3.A.2).

Pre-proposal. The CPE requires that a pre-proposal be submitted after a proposed program has achieved approval at the college level. Answers to questions identified with a * by the question number on this form will be used by OSPIE staff to submit the pre-proposal to the CPE (Council on Postsecondary Education).

Form structure. This form has two sections. The first half (white background) contains information required by the University Senate and Registrar's office and the second half (beige/brown background) contains information required by two external entities, the CPE and SACSCOC (Southern Association of Colleges and Schools Commission on Colleges). Although only the first half is required for University Senate approval, every question must be answered to receive CPE approval. Please do not leave any area blank, but instead write "not applicable" wherever that is the appropriate response.

Approval process. Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (possibly HCCC and/or GC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review via a committee and then to the SC and University Senate. (The contact person listed on the form will be informed when the proposal has been sent to committee and other times as appropriate.) Once approved by the Senate, the Senate Council office will submit the proposal for it to be placed on an agenda for the Board of Trustees. After approval by the Board, OSPIE will ensure the proposal is submitted to the CPE for final approval. Generally, a new program proposal must have received approval from the Senate by early spring (February or March) in order for the new program to be effective for the following fall semester.

INFORMATION REQUIRED BY UNIVERSITY SENATE	
1. Basic Information: Program Background and Overview	
1a	Home College: Arts & Sciences
1b	Home Educational Unit (school, department, college ¹): <i>Geography</i>
1c*	Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE (OSPIE@L.uky.edu) for help with questions in this section.)
	Date of Contact with OSPIE: 11/21/18
	<input checked="" type="checkbox"/> Appended to the end of this form is a PDF of the reply from OSPIE.
	<input checked="" type="checkbox"/> Appended to the end of this form is a letter of administrative feasibility from the Provost.
	<input checked="" type="checkbox"/> Appended to the end of this form is a letter(s) of administrative feasibility from the dean(s) of the college(s) offering the degree.
	CIP Code (confirmed by OSPIE): 03.0103

¹ Only interdisciplinary graduate degrees may be homed at the college level.

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	Degree Type (MA, MS, etc.) ² : MA		
	Is this degree designation on the CPE's list of degree designations ² ?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	If "No," please provide an explanation for OSPIE's use in external reporting purposes.		

1d*	Major Name (Biology, Finance, etc.): <i>Applied Environmental and Sustainability Studies</i>		
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1e	Is there a specialized accrediting agency related to this program?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," name:		
	Do you intend to seek accreditation from this agency?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

1f	Was this particular program ever previously offered at UK but subsequently suspended?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," describe. (300 word limit)		

1g*	Requested effective date:	<input type="checkbox"/> Fall semester following approval.	OR	<input checked="" type="checkbox"/> Specific Date ³ : <i>Fall 20 19</i>
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1h*	Anticipated date for granting first degree(s): <i>spring 2021</i>		
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1i*	Contact person name: <i>Dr. Patricia Ehrkamp</i>	Email: <i>p.ehrkamp@uky.edu</i>	Phone: <i>257-6952</i>
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2. Program Overview

2a*	Provide a brief description of the proposed program. (300 word limit) <i>Applied Environmental and Sustainability Studies (ENS) is an interdisciplinary field that prepares students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. The Master's in Applied Environmental and Sustainability Studies encourages a liberal arts approach by drawing from the humanities, social sciences, and mathematics and natural science disciplines. By taking coursework across disciplines students develop skills required for success in the field. Those skills may include critical thinking, independent learning, oral and written communication, problem solving, academic knowledge in environmental issues; an understanding of sustainability as it pertains to healthy, productive, and equitable quality of life for future generations. Students who complete the master's program will leave with skills in environmental studies, sustainability, and policy and governance. The master's program offers students the opportunity to develop applied skills such as geographic information systems and mapping, statistics, technical writing, or communication applications for environmental knowledge.</i>
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2b	List the program objectives of the proposed program. These objectives should deal with the specific institutional and societal needs that the program will address, such as how students will benefit from the program, both tangibly and intangibly. (Please note that "program objectives" are different from "student learning outcomes.") (300 word limit) The program objectives for the Online Master's in Applied Environmental and Sustainability Studies reflects the mission of the Department of Geography and the Environmental and Sustainability Studies interdisciplinary program. Graduates with a Master's in Applied Environmental and Sustainability Studies will: <ul style="list-style-type: none"> - Excel in environmental sustainability related careers - Foster critical thinking skills in relation to environmental problems and sustainability solutions
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² Visit <http://dataportal.cpe.ky.gov/cpedegreedesignations.aspx> for the CPE's list of approved degree designations.

³ Programs are effective the semester following approval. No program will be made effective unless all approvals, up through and including Board of Trustees and CPE approval, are received.

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	- Encourage interdisciplinary approaches to environmental and sustainability concerns
2c*	<p>List the intended student learning outcomes (SLOs) for the proposed program. Address one or more of the five areas of learning: 1. broad, integrative knowledge; 2. specialized knowledge; 3. intellectual skills; 4. applied learning; and 5. civic learning. (300 word limit) (More detailed information will be addressed in a subsequent question.)</p> <p><i>SLO #1: Students will be able to identify environmental challenges that face the world and demonstrate the implications and limitations for future generation through research. (Integrative Knowledge)</i></p> <p><i>SLO #2: Students will be able to demonstrate an understanding of the environmental, social, and economic dimensions of sustainability studies through data collection and analysis. (Specialized knowledge- Students demonstrate an understanding of a specialization or major field of study. Learning outcomes are specific to the major or specialization.)</i></p> <p><i>SLO #3: Students will be able to differentiate and evaluate the strengths and weaknesses of different methodologies and techniques to address environmental challenges. (Intellectual skills)</i></p> <p><i>SLO #4: Students will be able to apply knowledge and skills to address problems through scientific inquiry, creative and other methods, both individually and collaboratively. (Applied Learning)</i></p> <p><i>SLO #5: Students will be able to demonstrate an understanding of environmental and sustainability studies, and look beyond individual and local interests to identify and evaluate our social and economic responsibilities. (Civic Learning)</i></p>
2d	<p>Describe the rationale and motivation for the program. Give reference to national context, including equivalents in benchmark institutions. (150 word limit)</p> <p><i>There is a persistent and growing demand among employers for workplace professionals who can discern and assess complex environmental and sustainability issues, have the problem-solving and analytical skills to solve complex environmental and sustainability problems, and can communicate issues related to environmental and sustainability policies, management, and solutions to corporate, governmental, and non-governmental audiences as well as the wider public. The College of Arts and Sciences already has an established undergraduate program in Environmental and Sustainability Studies. As of fall 2018, there are 90 students pursuing a undergraduate major in Environmental and Sustainability Studies and 21 students pursuing a minor in environmental and Sustainability studies. Based on a survey conducted in January 2019, there is a strong demand by current Environmental and Sustainability Studies undergraduate students as well as by students in the interdisciplinary major in Natural Resources and Environmental Science for a graduate level program. According to Burning Glass the number of awarded Master's in Environmental Studies has increased by almost 14% since 2013.</i></p> <p><i>Please see Attachment 2d for benchmarks, survey responses, and burning glass data.</i></p>
2e	<p>Describe the proposed program's uniqueness within UK. (250 word limit)</p> <p><i>There are no graduate level programs at the University of Kentucky in Environmental and Sustainability Studies. There are also no graduate level programs at the university that prepare students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change.</i></p>
2f	<p>Describe the target audience. (150 word limit)</p> <p><i>The Master's program will be open to all students interested in expanding their advanced environmental and sustainability skills. Our primary target audience includes currently enrolled students at the University of Kentucky, and workplace professionals who possess a Bachelor's degree and are seeking an advanced degree in important skills that will translate into greater professional opportunities.</i></p>

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	<i>The online Master in Applied Environmental and Sustainability Studies would be of interest to students pursuing an undergraduate degree in Environmental and Sustainability Studies, Geography, or Natural Resources and Environmental Science.</i>		
2g*	Does the program allow for any concentrations?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," name the concentration(s). (<i>Specific course requirements will be described in Section A, part 7.</i>)		
	Concentration #1:		
	Concentration #2:		
	Concentration #3:		
2h	Are necessary resources available for the proposed new program? (<i>A more detailed answer is requested in Section A, part 4.</i>)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2i	Describe how the proposed program will be administered, including admissions, student advising, retention, etc. (<i>150 word limit</i>)		
	<p><i>The online Master's in Applied Environmental and Sustainability Studies will be administered by the program director who will be a member of the graduate faculty and appointed by the dean of the College of Arts & Sciences in consultation with the faculty of record. Following the guidelines from the Graduate School students will be admitted under the minimum requirements for a graduate degree granting program. Students must submit a transcript showing an awarded bachelor's degree from a fully accredited U.S. institution of higher learning or from a recognized foreign institution, have an overall undergraduate grade point average of 2.75 on undergraduate work and 3.00 on all graduate work (both on a 4.00 point scale).</i></p> <p><i>We will not require the Graduate Record Examination (GRE), as recent research demonstrates that the GRE does not predict academic success. The director of the master's program will advise students. Retention will be monitored by the director of the MA program in consultation with the faculty of record.</i></p>		
2j	Are multiple units/programs collaborating to offer this program?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," please discuss the resource contribution(s) from each participating unit/program. (<i>150 word limit</i>) (<i>Letters of support will be addressed in Part A, section 7.</i>)		
2k	List all UK programs ⁴ that the proposed program could be perceived as replicating. Give a rationale for why this is not duplication, or is a necessary duplication. (<i>250 word limit</i>)		
	<i>There are no other graduate programs at UK that the online Master's in Applied Environmental and Sustainability Studies could be perceived as replicating.</i>		
2l	Will the faculty of record for the proposed new master's degree be the graduate faculty of the department/school offering the proposed new degree?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "No," please describe the faculty of record for the proposed master's program, including: selection criteria; term of service; and method for adding/removing members. Will the existing director of graduate studies (DGS) in the department/school be the DGS for this proposed master's degree?		

⁴ You must include a letter of support from any other program's home unit. Please convert the letter to a PDF and append to the end of this form.

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The College of Arts and Sciences will be submitting a proposal later this semester to move the Environmental and Sustainability Studies Interdisciplinary program into the Department of Geography. The interdisciplinary program is currently housed under the College of Arts and Sciences. The faculty of record for the Master's in Applied Environmental and Sustainability Studies will be the already established faculty of record in the Department of Geography. The Department of Geography has an established Doctoral and Master's program in Geography. They also have an established Online Master's and Graduate Certificate in Digital Mapping. The Department of Geography has 22 regular full-time faculty members. Of those regular full-time faculty members, 21 are members of the graduate faculty.

2m	Will the program have an advisory board ⁵ ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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If "Yes," please describe the standards by which the faculty of record will select members of the advisory board, the duration of service on the board, and criteria for removal. *(150 word limit)*

If "Yes," please list below the number of each type of individual (as applicable) who will be involved in the advisory board.

	Faculty within the college who are within the home educational unit.
	Faculty within the college who are outside the home educational unit.
	Faculty outside the college who are within the University.
	Faculty outside the college and outside the University who are within the United States.
	Faculty outside the college and outside the University who are outside the United States.
	Students who are currently in the program.
	Students who recently graduated from the program.
	Members of industry.
	Community volunteers.
	Other. Please explain:
	Total Number of Advisory Board Members

3. Delivery Mode	UK DLP and eLearning Office ⁶
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3a*	Initially, will any portion of the proposed program's core courses be offered via distance learning ⁷ ?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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If "Yes," please indicate below the percentage of core courses that will be offered via distance learning.

(check one)	1% - 24% <input type="checkbox"/>	25% - 49% <input type="checkbox"/>	50% - 74% <input type="checkbox"/>	75 - 99% <input type="checkbox"/>	100% <input checked="" type="checkbox"/>
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NOTE: Programs in which 25% or more of the program will be offered via distance learning may need to submit a [substantive change prospectus](#) to SACS. Please contact institutionaleffectiveness@uky.edu for assistance. *The prospectus is required by SACS, but it is NOT required for Senate review.*

3b*	If <i>any</i> percentage of the program will be offered via the alternative learning formats below, check all that apply, below.
	<input checked="" type="checkbox"/> Distance learning.

⁵ An advisory board includes both faculty and non-faculty who are expected to advise the faculty of record on matters related to the program, e.g. national trends and industry expectations of graduates.

⁶ For questions about alternative delivery modes, please contact UK's Distance Learning Programs and e-Learning office (<http://www.uky.edu/DistanceLearning/>).

⁷ Per the Southern Association of Colleges and Schools Commission on Colleges (SACS) definition of distance education, distance education is a formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous.

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<input type="checkbox"/>	Courses that combine various modes of interaction, such as face-to-face, videoconferencing, audio-conferencing, mail, telephone, fax, email, interactive television, or World Wide Web.
<input checked="" type="checkbox"/>	Technology-enhanced instruction.
<input type="checkbox"/>	Evening/weekend/early morning classes.
<input checked="" type="checkbox"/>	Accelerated courses.
<input type="checkbox"/>	Instruction at nontraditional locations, such as employer worksite.
<input type="checkbox"/>	Courses with multiple entry, exit, and reentry points.
<input type="checkbox"/>	Modularized courses.

3c	<p>Give pedagogical rationale for the use of alternative delivery modes in the proposed program. Consider the aspects below and elaborate as appropriate. (200 word limit)</p> <ul style="list-style-type: none"> • Synchronous and asynchronous components. • Balance between traditional and non-traditional aspects. • Hybrid elements. <p><i>The courses in the Online Applied Master's in Environmental and Sustainability Studies are intended to be offered asynchronously. The online 8-week courses will attract non-traditional and part time students by allowing them the flexibility to complete the degree program at their own pace.</i></p>
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4. UK Resources

4a*	Will the program's home educational unit require new or additional faculty?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," provide a plan to ensure that appropriate faculty resources are available, either within UK or externally, to support the program. Note whether the new and additional faculty will be part-time or full-time faculty. If "No," explain why. (150 word limit)		
	<i>No new faculty are needed to launch this Master's program. The courses will be taught by current faculty.</i>		
	If "Yes," when will the faculty be appointed? (150 word limit)		

4b	Will the program's home educational unit require additional non-faculty resources, e.g. classroom space, lab space, or equipment?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," provide a brief summary of additional non-faculty resources that will be needed to implement this program over the next five (5) years. If "No," explain why. (150 word limit)		
	<i>There are no (non-course) related resources needed to implement the Online Master's in Applied Environmental and Sustainability Studies. The program will be offered 100% through distance learning, so no additional space or equipment will be needed.</i>		

4c	Will the program include courses from another educational unit(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," list the courses and identify the other educational units and subunits that have approved the inclusion of their courses. (150 word limit)		
	<i>Please see attachment 4c for the list of courses from other educational units.</i>		
	<p>If "Yes," append to the end of this form a letter of support from the appropriate educational unit chair/director from whose unit individual courses will be used. A letter must include the following:</p> <ul style="list-style-type: none"> • Demonstration of true collaboration between multiple units⁸; • Impact on the course's use on the home educational unit; and • Verification that the chair/director has consent from the faculty members of the unit. 		

⁸ Show evidence of detailed collaborative consultation with such units early in the process.

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4d	Fill out the faculty roster below for full-time and part-time faculty teaching major core courses in the proposed program.		
NAME	COURSES TAUGHT	ACADEMIC DEGREES AND COURSEWORK	OTHER QUALIFICATIONS AND COMMENTS
List name & identify faculty member as "F" (full-time) or "P" (part-time).	Include term; course prefix, number and title; & credit hours. Identify courses as D, UN, UT or G.	List relevant courses taught, including institution and major.	Note qualifications and comments as they pertain to course taught.
Dr. Betsy Beymer-Farris- FT	ENS 601 and ENS 603	PhD in Geography, University of Illinois-Urbana	
Dr. Tony Stallins- FT	ENS 602	PhD in Geography, University of Georgia	
Dr. Ted Schatzki- FT	ENS 601	PhD in Philosophy, University of California- Berkeley	Dr. Schatzki's primary faculty appointment is in the Department of Geography. Over the last decade, his research and statement interests have moved away from philosophy into social theory.
FT = full time PT= part time	D = developmental UN = undergraduate nontransferable UT = undergraduate transferable		

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	G = graduate
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5. Assessment – Program Assessment and Student Learning Outcomes (SLOs)	
5a	Referring to program objectives, student benefits, and the target audience (questions 2b and 2f), explain how the <i>program</i> will be assessed, which is different from assessing student learning outcomes. Include how the faculty of record will determine whether the program is a success or a failure. List the benchmarks, the assessment tools, and the plan of action if the program does not meet its objectives. <i>(250 word limit)</i>
	<i>Please see attachment 5 for assessment</i>
5b	<i>(related to section 15)</i> Append an assessment plan ⁹ for the SLOs to the end of this form. (Click HERE for a sample assessment plan.)
5c	Explain how the curriculum achieves the program level student learning outcomes by describing the relationship between the overall curriculum or the major curricular components and the program objectives. <i>(300 word limit)</i>
	Please see attachment 5 for assessment
5d	Append a PDF of the program’s course map ¹⁰ to the end of this form. (Click HERE for a sample curricular map.)
5e	<i>(related to 2c)</i> Based on the SLOs from question 2c, which components will be evaluated, i.e. course mapping? For each student learning outcome identify in which courses it is covered in the curriculum and note whether employers, students, alumni, and/or faculty outside of the program were involved in the development of student learning outcomes. <i>(300 word limit)</i> .
	<i>Please see attachment 5 for assessment</i>
5f	When will components be evaluated? Identify the review cycle for each student learning outcome. (e.g, every semester or each year) <i>(150 word limit)</i>
	<i>Please see attachment 5 for assessment</i>
5g	When will the data be collected? (This may or may not be different from when the assessment is <i>conducted</i> .) <i>(150 word limit)</i>
	<i>Projects and assignments from the courses offered in the curriculum will be collected and assessed annually, according to the three-year assessment cycle. The program director will convene an assessment committee consisting of 3-4 faculty members who teach courses in the program; they will evaluate student learning outcomes as demonstrated by student artifacts, using a rubric created by the committee to assess the content material of all student learning outcomes. The program director will be responsible for collating the assessment data and writing the annual assessment report, in collaboration with the assessment committee. The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed. Please see attachment 5 for additional information.</i>
5h	How will the data be collected? <i>(150 word limit)</i>
	<i>Projects and assignments from the courses offered in the curriculum will be collected and assessed annually, according to the three-year assessment cycle. The program director will convene an assessment committee consisting of 3-4 faculty members who teach courses in the program; they will evaluate student learning</i>

⁹ An assessment plan is typically a tabular grid that illustrates the artifacts, rubrics, assessment team, and periods of assessment for the SLOs.

¹⁰ Course mapping (or “curricular mapping”) is a representation of how faculty intend to approach and assess each of the student learning outcomes identified for the courses for the degree program, with an emphasis on courses required for all degree candidates. It is a master chart that indicates which objectives are being met, to what extent, and how often. This identifies whether an objective is “introduced,” “developed,” and/or “mastered” within a given course; it may be helpful also to chart any classroom-based assessment measures used to demonstrate that claim.

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	outcomes as demonstrated by student artifacts, using a rubric created by the committee to assess the content material of all student learning outcomes. The program director will be responsible for collating the assessment data and writing the annual assessment report, in collaboration with the assessment committee. The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.
5i	What will be the benchmarks and/or targets to be achieved? (150 word limit) <i>All outcomes are assessed using rubrics created by the certificate program faculty for the targeted Student Learning Outcome. Students must receive a 3 or 2 on the assignment to consider the learning outcome met. Please see attachment 5 for more information.</i>
5j	What individuals or groups will be responsible for data collection? (150 word limit) <i>Assignments will be collected in all courses offered in the curriculum. The program director will collect the assignments and share with the assessment committee by April 30th every year. The Assessment Coordinator will convene a committee to review the targeted Student Learning Outcomes for that year. Members of the assessment committee will be drawn from the faculty of record.</i>
5k	How will the data and findings be shared with faculty? (150 word limit) <i>The program director will also serve as the Director of Graduate Studies (DGS) and will act as assessment coordinator. It is the responsibility of the assessment coordinator to monitor the activities of assessment that occur in the certificate program. The assessment coordinator will convene an assessment committee annual for the assessment of student artifacts, and will assemble the results into an annual assessment report, which will be communicated to the faculty of record and delivered to the college. The certificate director will discuss the results of the assessment with the faculty of record on an annual basis</i>
5l	How will the data be used for making programmatic improvements? (150 word limit) <i>The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.</i>
5m	What are the measures of teaching effectiveness? (150 word limit) <i>All instructors will use the university teacher course evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement during the biannual faculty merit evaluation report process. The chair will review the TCE results with instructors and provide feedback to the instructors on an annual basis, and discuss self-reflection on a biannual basis.</i>
5n	What efforts to improve teaching effectiveness will be pursued based on these measures? (150 word limit) <i>All instructors will use the university teacher course evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement during the biannual faculty merit evaluation report process. The chair will review the TCE results with instructors and provide feedback to the instructors on an annual basis, and discuss self-reflection on a biannual basis.</i>
5o	What are the plans to evaluate students' post-graduate success? (150 word limit) <i>Our program will look at data provided by the university alumni survey. The program will attempt to stay in contact with former students through an alumni mailing list, to be initiated at the inception of the program. Periodic surveys of alumni will be taken through this venue.</i>

6. Miscellaneous

6a	Is there anything else about the proposed program that should be mentioned? (150 word limit)
	n/a

7. Non-Course Requirements

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7a	Will the program require completion of a bachelor's degree from a fully accredited institution of higher learning?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If "No," explain below. (150 word limit)			
7b	The Graduate School requires applicants to have an overall GPA of 2.75 on undergraduate work. Will the program have a higher undergraduate GPA requirement?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If "Yes," describe below. (150 word limit)			
Per the University Senate Rules we are petitioning the Graduate Council to exempt applicants for the Online Master's in Applied Environmental and Sustainability Studies from the requirement to submit Graduate Record Examination scores.			
7c	Will the proposed program include requirements for testing (e.g. GRE, GMAT, TOEFL) to be considered for admission?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If "Yes," name each test and describe the specific requirements, scores, etc. below. (150 word limit)			
<p><i>We will require the graduate school's minimum scores for the TOEFL for international applicants. We will not require the Graduate Record Examination.</i></p> <p><i>Per the University Senate Rules we are petitioning the Graduate Council to exempt applicants for the Online Master's in Applied Environmental and Sustainability Studies from the requirement to submit Graduate Record Examination scores (GRE). The GRE can pose unnecessary obstacles on otherwise talented students, many of whom are disadvantaged minorities or non-traditional students that are returning after longer breaks from academic work. We do not believe that GRE scores can predict those who will do well in a graduate program.</i></p>			
7d	Will the program have a world language requirement?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If "Yes," describe below. (150 word limit)			
7e	The Graduate School allows transfer of up to nine credits or 25% of course work. Please describe transfer credit limitations below for the proposed program. (150 word limit)		
<p>Students will be able to transfer up to nine credit hours of graduate work if the credits meet the criteria and requirements of the program. The program director will consult with students on feasibility of transferring credits based on a review of the student's transcripts and syllabus of courses taken in other programs.</p> <p>According to the University of Kentucky Graduate School bulletin: upon request of the DGS, a total of 9 hours (or 25% of regular course degree requirements) may be transferred into a master's degree program. The transferable hours include all post-baccalaureate work, graduate work taken at another regionally- accredited university or as a student in another graduate program at the University of Kentucky.</p> <ul style="list-style-type: none"> • Course credits applied toward a previously awarded graduate degree cannot be transferred. • Transfer of independent work, research, thesis, or dissertation credit is not permitted. • Short courses lasting fewer weeks than the number of credits may not be transferred. • A student must have been in graduate status at the time the courses were taken. • A student must be in good academic standing at the time of transfer. • Only courses assigned a B grade or better can be transferred. 			

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	<ul style="list-style-type: none"> • Courses must have been taken no more than 10 years (masters) or 8 years (doctoral) prior to the semester the transfer is requested. • Transfer of external credit cannot be applied to a graduate certificate unless it is specified and justified in the initial request to establish the certificate (or at the time of renewal). 		
7f	Will the program have a thesis requirement (Plan A)? (If "Yes," explain the requirements below. If "No," proceed to question 6g)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
7g	Will the program have a non-thesis requirement (Plan B)? (If "Yes," explain the requirements below. If "No," proceed to question 6h)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain the requirements below.		
	<p>Students have two options to complete the non-thesis requirement for the Online Master's in Applied Environmental and Sustainability Studies. All students will be required to complete a one-hour oral exam. Students may choose to....</p> <p>1) Complete 6 credit hours of internship coursework through ENS 697 (3ch) and ENS 698 (3ch) or</p> <p>2) Complete 6 credit hours through a capstone research project and report through ENS 695 (3ch) and ENS 696 (3ch).</p>		
7h	Provide the final examination criteria.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	<p>All students will complete a one-hour oral final examination.</p> <p>Students who completed their capstone requirement through internship will be examined on the coursework for the Master's, the ways they applied their coursework in their internship, and the report they wrote about the internship.</p> <p>Students who completed their capstone requirement through a research project will be examined on the coursework for the Master's, the ways they used their coursework to conduct an independent research project, and the report they wrote about their independent research project.</p>		
7i	Describe termination criteria.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	<p>The termination criteria will be the same criteria specified by the Graduate School.</p> <ul style="list-style-type: none"> - Scholastic probation for three enrolled semesters - Having failed twice the final examination for the master's 		
8. Course Requirements.			
8a	Document the total credit hours required by level below. At least two-thirds of the minimum requirements for the master's or specialist degree must be in regular courses, and at least half of the minimum course requirements (excluding thesis, practicum, or internship credit) must be in 600- or 700-level courses.		
	400G-level:	500-level: 3-9	600-level: 15-21
			700-level: 3-9
8b*	What is the total number of credit hours required for the degree? ¹¹ (e.g. 24, 32)		30
	If an explanation about the total credit hours is necessary, use the space below. (150 word limit)		

¹¹ A non-thesis option (Plan B) requires that six or more graduate credit hours of course work be submitted in lieu of a thesis.

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8k	Provide the free electives courses language that will be included in the Graduate School Bulletin. (150 word limit)		
	n/a		
Courses for a program's concentration(s).			
Click HERE for a template for additional concentrations ¹⁶ .			
8l	Does the program include any concentrations? (If "Yes," indicate and proceed to question 7m. If "No," indicate and proceed to 7p.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
8m	Concentration name:		
Prefix & Number	Course Title (Check the appropriate box to describe the course as "a core course for the concentration" or "an elective course for the concentration.")	Credit Hrs	Course Status ¹⁷
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
8n	Provide concentration-related language that should be included in the Graduate School Bulletin. (150 word limit)		
8o	Does the program have an additional concentration? (If "Yes," indicate and proceed to question 7p. If "No," indicate and proceed to 7r.)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

¹⁶ Append a PDF with each concentration's courses to the end of this form.

¹⁷ Use the drop-down list to indicate if the course will be newly proposed as a new course ("new"), if the course is an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

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8p	Concentration #2 Name:		
Prefix & Number	Course Title (Check the appropriate box to describe the course as "a core course for the concentration" or "an elective course for the concentration.")	Credit Hrs	Course Status ¹⁸
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....
	<input type="checkbox"/> Core <input type="checkbox"/> Elective		Select one....

Total Credit Hours, Concentration #2:

8q Provide concentration-related language that should be included in the Graduate School Bulletin for the second concentration. (150 word limit)

8r Is there anything else about the proposed program that should be mentioned? (150 word limit)

9. Degree Plan

9a	Create a degree plan for the proposed program by listing in the table below the courses that a typical student would take each semester. Use the spaces for "Year 3" only if necessary. If multiple concentrations are available, click HERE for a template for additional concentrations. Append a PDF with each concentration's semester-by-semester program of study to the end of this form.			
	YEAR 1 - FALL:	<i>ENS 601(3ch) ENS 602(3ch) Skills Course (3ch)</i>	YEAR 1 - SPRING:	<i>ENS 603(3ch) Skills Course (3ch) Elective (3ch)</i>
	YEAR 2 - FALL :	<i>Elective (3ch) Elective (3ch)</i>	YEAR 2 - SPRING:	<i>Internship or Research (ENS 697 or ENS 695) Internship or Research (ENS 698 or ENS 696)</i>

¹⁸ Use the drop-down list to indicate if the course will be newly proposed as a new course ("new"), if the course is an existing course that will change ("change"), or if the course is an existing course that will not change ("no change").

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YEAR 3 - FALL:		YEAR 3 - SPRING:	
9b	With reference to the degree plan above, explain how there is progression in rigor and complexity in the courses that make up the program. (150 word limit)		
	<i>Students are required to complete at least 15 credit hours at the 600 level or above.</i>		
10. Approvals/Reviews			
Information below does not supersede the requirement for individual letters of support from educational unit administrators and verification of faculty support (typically takes the form of meeting minutes).			
	Reviewing Group Name	Date Approved	Contact Person Name/Phone/Email
10a	<i>(Within College) In addition to the information below, attach documentation of department and college approval. This typically takes the form of meeting minutes but may also be an email from the unit head reporting department- and college-level votes.</i>		
			/ /
			/ /
			/ /
			/ /
10b	<i>(Collaborating and/or Affected Units)</i>		
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
10c	(Senate Academic Council)	Date Approved	Contact Person Name
	Health Care Colleges Council (if applicable)		
	Graduate Council	4/4/19	Roshan Nikou

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INFORMATION REQUIRED BY CPE AND SACS	
11. Program Overview – Program Quality and Student Success	
11a*	<p>Highlight any distinctive qualities of the proposed program. Are any faculty nationally or internationally recognized for expertise in this field? Does this program build on the expertise of an existing locally, nationally, or internationally recognized program at UK? (300 word limit)</p> <p><i>Applied Environmental and Sustainability Studies (ENS) is an interdisciplinary field that prepares students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. The Master's in Applied Environmental and Sustainability Studies encourages a liberal arts approach by drawing from the humanities, social sciences, and mathematics and natural science disciplines. By taking coursework across disciplines, students develop skills required for success in the field. Those skills may include critical thinking, independent learning, oral and written communication, problem solving, academic knowledge in environmental issues; an understanding of sustainability as it pertains to healthy, productive, and equitable quality of life for future generations. Students who complete the master's program will leave with skills in environmental studies, sustainability, and policy and governance. The master's program offers students the opportunity to develop applied skills such as geographic information systems and mapping, statistics, technical writing, or communication applications for environmental knowledge, including management, marketing, finance, and economics.</i></p> <p><i>The College of Arts and Sciences is the largest college at University of Kentucky with 18 departments and more than 400 faculty members. The faculty within the College of Arts and Sciences are among the university's most celebrated, garnering praise for their contributions to research, education and service. 50% of the University research professors are in the College of Arts and Sciences. The Geography program is one of the top 20 programs among public institutions. Students earning the Online Master's in Applied Environmental and Sustainability Studies are able to benefit from this high quality instruction.</i></p>
11b	<p>Clearly state the student admission, retention, and completion standards designed to encourage high quality. (300 words)</p> <p><i>The online Master's in Applied Environmental and Sustainability Studies will be administered by the program director who will be a member of the graduate faculty and appointed by the dean of the College of Arts & Sciences in consultation with the faculty of record. Following the guidelines from the Graduate School students will be admitted under the minimum requirements for a graduate degree granting program. Students must submit a transcript showing an awarded bachelor's degree from a fully accredited U.S. institution of higher learning or from a recognized foreign institution, have an overall undergraduate grade point average of 2.75 on undergraduate work and 3.00 on all graduate work (both on a 4.00 point scale).</i></p> <p><i>We will not require the Graduate Record Examination (GRE). The GRE can pose unnecessary obstacles on otherwise talented students, many of whom are disadvantaged minorities or non-traditional students that are returning after longer breaks from academic work. We do not believe that GRE scores can predict those who will do well in a graduate program. The director of the master's program will advise students. Retention will be monitored by the director of the MA program in consultation with the faculty of record.</i></p>
11c*	<p>Describe how the proposed program will articulate with related programs in the state. Include the extent to which student transfer has been explored and coordinated with other institutions. Note: Convert all draft articulation agreements related to this proposed program to PDF and append to the end of this form. (300 word limit)</p> <p><i>According to the University of Kentucky Graduate School bulletin: upon request of the DGS, a total of 9 hours (or 25% of regular course degree requirements) may be transferred into a master's degree program. The transferable hours include all post-baccalaureate work, graduate work taken at another regionally- accredited university or as a student in another graduate program at the University of Kentucky.</i></p> <ul style="list-style-type: none"> <i>• Course credits applied toward a previously awarded graduate degree cannot be transferred.</i> <i>• Transfer of independent work, research, thesis, or dissertation credit is not permitted.</i> <i>• Short courses lasting fewer weeks than the number of credits may not be transferred.</i> <i>• A student must have been in graduate status at the time the courses were taken.</i>

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	<ul style="list-style-type: none"> • <i>A student must be in good academic standing at the time of transfer.</i> • <i>Only courses assigned a B grade or better can be transferred.</i> • <i>Courses must have been taken no more than 10 years (masters) or 8 years (doctoral) prior to the semester the transfer is requested.</i> • <i>Transfer of external credit cannot be applied to a graduate certificate unless it is specified and justified in the initial request to establish the certificate (or at the time of renewal).</i>
11d	<p>Identify the applicant pool and how applicants will be reached. (300 word limit)</p> <p><i>The Master's program will be open to all students interested in expanding their advanced environmental and sustainability skills. Our primary target audience includes currently enrolled students at the University of Kentucky, and workplace professionals who possess a Bachelor's degree and are seeking an advanced degree in important skills that will translate into greater professional opportunities. The applicant pool may be diverse including non-traditional students and life-long learners.</i></p> <p><i>The online Master in Applied Environmental and Sustainability Studies would be of interest to students pursuing an undergraduate degree in Environmental and Sustainability Studies, Geography, or Natural Resources and Environmental Science.</i></p> <p><i>We will market the program to undergraduate students through the advising hub, academic advisors, and student listservs. We will work closely with the Center for the Enhancement of Learning and Teaching (CELT) to market the program through UK Online in order to reach non-traditional students and workplace professionals.</i></p>
12. Mission: Centrality to the Institution's Mission and Consistency with State's Goals	
12a*	<p>(related to 2b) Explain how the program objectives support at least two aspects of UK's institutional mission and academic strategic plan? (150 word limit)</p> <p><i>The proposed Master's degree will contribute to strengthening the quality and distinctiveness of our graduate programs to transform our students into accomplished scholars and professionals who contribute to the Commonwealth, the nation, and the world through their research, discovery, and creative endeavors. We seek to provide high quality education by expertly trained researchers and scholars to achieve the following goal:</i></p> <ul style="list-style-type: none"> • <i>Facilitates learning, informed by scholarship and research</i> <p><i>In teaching environmental knowledge and applicable skills with regard to problem solving and enhancing sustainability in a variety of societal and economic sectors we also support.</i></p> <ul style="list-style-type: none"> • <i>Serves a global community by disseminating, sharing and applying knowledge</i> <p><i>In addition, we support the University's mission of enhancing economic development and quality of life in the state of Kentucky and beyond through teaching not only important topical knowledge but also transferable and job-readiness skills.</i></p>
12b*	<p>(related to 2b) How do the program objectives support at least two aspects of the Council on Postsecondary Education's (CPE) Strategic Agenda and the statewide implementation plan? (300 word limit)</p> <p><i>The objectives described above support several aspects of the CPE's Strategic Agenda and statewide implementation plan.</i></p> <p><i>Objective 3: Increase participation in postsecondary education, particularly among traditionally underserved populations: This program will increase Kentucky residents ages 25-64 enrolled in postsecondary education. The MA in Applied Environmental and Sustainability Studies will be of interest to no-traditional students, working professionals, and life-long learners.</i></p> <p><i>Objective 9: Improve the career readiness and employability of postsecondary education graduates: This program will improve the employability of postsecondary education graduates by providing them with additional skills that employers are looking for in candidates. The program will also increase the number of degree graduates working or pursuing additional education.</i></p>

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12c*	If an approval letter from an Education Professional Standards Board (EPSB) is required, check the box below and append a PDF version of the letter to this form. <input type="checkbox"/> (E.g. any program leading to teacher, principal, or superintendent certification, rank change, etc.)
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13. Resources

13a*	How will the program support or be supported by other programs within the institution? For example, shared faculty, shared courses, collaborative research, etc. (300 word limit)
	<i>This degree program will rely on courses offered in the Department of Geography, the Department of Statistics, the Department of Natural Resources and Environmental Science, the Department of Writing, Rhetoric and Digital Studies, and the Environmental and Sustainability Studies (ENS) interdisciplinary program.</i> <i>There will be no shared faculty.</i>

13b	What will be the projected “faculty-to-student in major” ratio? (150 word limit)
	<i>1-9</i>

13c	Describe the library resources available ¹⁹ to support this program. Access to the qualitative and quantitative library resources must be appropriate for the proposed program and should meet recognized standards for study at a particular level or in a particular field where such standards are available. Adequacy of electronic access, library facilities, and human resources to service the proposed program in terms of students and faculty will be considered. (300 word limit)
	<i>The University of Kentucky has an established Distance Learning Library Service that is staffed by a full-time librarian. The Distance Learning (DL) Library Service, via the DL Librarian, assists students and faculty in determining the most effective ways to use academic library research materials via e-mail, chat, phone, Zoom, or in person. The policy of the DLLS is to provide access to library materials and information resources for students who take online and hybrid courses, as well as for the faculty who teach those classes. DL students are to receive the same caliber of library services and have access to the same information sources as on-campus students, including: access to both print and electronic materials, research databases, Interlibrary Loan, Research Guides on topics in a variety of disciplines, as well as course-specific guides. The Distance Learning Library Service includes the following:</i> <ul style="list-style-type: none"> <i>• Providing access to information resources and materials from the UK Libraries collection, or Interlibrary Loan, and delivered electronically or in paper via U.S. Mail.</i> <i>• Offering research consultations and information literacy instruction sessions. Contact Carla Cantagallo to schedule. Providing reference services through e-mail, chat, phone, Zoom, or in person</i> <i>• Offering copyright assistance and assisting with links to library resources</i> <i>• Serving as an embedded librarian in courses using Canvas</i> <i>• Assisting with EndNote</i> <i>• Creating course-specific library guides and connecting students to other relevant research guides</i> <i>All DL students receive Link Blue accounts and library card accounts the same as on campus students. The Link Blue user ID and password allows students remote access via proxy server to electronic library resources (databases, e-journals and eBooks). The library card account identifies DL students in the UK Library circulation system, for the purposes of borrowing UK Library materials and creating an Interlibrary Loan account (ILLiad), for requesting items not held by the UK Library system.</i>

13d	Describe the physical facilities and instructional equipment available to support this program. Physical facilities and instructional equipment must be adequate to support a high-quality program. Address the availability of classroom, laboratory, and office space, as well as any equipment needs. (300 word limit)
	<i>The Master’s in Applied Environmental and Sustainability Studies will be offered 100% online. No physical facilities or instructional equipment will be needed for this program.</i>

14. Demand and Unnecessary Duplication

¹⁹ Please contact Institutional Effectiveness (institutionaleffectiveness@uky.edu) for more information.

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14a*	<p>Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand, career opportunities at any level, or any recent trends in the discipline that necessitate a new program. (300 word limit)</p> <ul style="list-style-type: none"> • This evidence is typically in the form of surveys of potential students and enrollments in related programs at the institution. • Anecdotal evidence is insufficient. Demonstrate a systematic collection of data, thorough study of the data, and a reasonably estimated student demand for the program. <p>Provide evidence of student demand at state and national levels.</p>		
<p><i>We polled undergraduate students, inviting students in two majors (N=220). Our Qualtrics survey yielded 82 responses (n=82). Of the 82 students that responded to our poll, 43 students answered 'yes' they would be interested in an MA in Environmental and Sustainability Studies at UK, and another 29 answered 'maybe' to that question. 37 students said they would want to take such a MA degree online, and 47 students answered they'd be interested in pursuing such a degree as a part-time option. We asked students for additional feedback and several non-traditional students suggested that an online MA degree would allow them to pursue a career while working full-time and raising a family, while other would want to combine the MA in Applied Environmental and Sustainability Studies to a law degree. Several other students responded that they thought an MA would be the additional qualification they needed in order to obtain the kinds of positions in their fields that were appealing to them.</i></p> <p><i>Please see attachment 2d for additional information.</i></p>			
14b	<p>Clearly state the degree completion requirements for the proposed program. (150 word limit)</p>		
<p>Students will be required to complete a total of 30 credit hours for the Online Master's in Applied Environmental and Sustainability Studies. Students must complete 24 credit hours in graduate level courses and 6 graduate credit hours in either internship credits or 6 graduate credit hours in a capstone research course and written report.</p> <p>All students will complete a one-hour oral final examination.</p> <p>For students who completed their capstone requirement through intership will be examined on the coursework for the Master's, the ways they applied their coursework in their intership, and the report they wrote about the intership.</p> <p>For students who completed their capstone requirement through a research project will be examined on the coursework for the Master's, the ways they used their coursework to conduct an independent research project, and the report they wrote about their independent research project.</p>			
14c*	<p>Will this program replace or enhance any existing program(s) or tracks (or concentrations or specializations) within an existing program? (300 word limit)</p>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<p>If "Yes," explain:</p>			
14d	<p>Identify the primary feeders for the program. (150 word limit)</p>		
<p><i>The Master's program will be open to all students interested in expanding their advanced environmental and sustainability skills. Our primary target audience includes currently enrolled students at the University of Kentucky, and workplace professionals who possess a Bachelor's degree and are seeking an advanced degree in important skills that will translate into greater professional opportunities.</i></p> <p><i>The online Master in Applied Environmental and Sustainability Studies would be of interest to students pursuing an undergraduate degree in Environmental and Sustainability Studies, Geography, or Natural Resources and Environmental Science.</i></p>			
14e	<p>Describe the student recruitment and selection process. (300 word limit)</p>		

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<p><i>We will market the program to undergraduate students through the advising hub, academic advisors, and student listservs. We will work closely with the Center for the Enhancement of Learning and Teaching (CELT) to market the program through UK Online in order to reach non-traditional students and workplace professionals.</i></p> <p><i>Following the guidelines from the Graduate School students will be admitted under the minimum requirements for a graduate degree granting program. Students must submit a transcript showing an awarded bachelor's degree from a fully accredited U.S. institution of higher learning or from a recognized foreign institution, have an overall undergraduate grade point average of 2.75 on undergraduate work and 3.00 on all graduate work (both on a 4.00 point scale).</i></p> <p><i>We will not require the Graduate Record Examination (GRE), as recent research demonstrates that the GRE does not predict academic success. The director of the master's program will advise students. Retention will be monitored by the director of the MA program in consultation with the faculty of record.</i></p>			
14f*	Specify any distinctive qualities of the proposed program. (300 word limit)		
	<i>The Master's in Applied Environmental and Sustainability Studies will be offered 100% through Distance Learning.</i>		
14g	Provide any evidence of a projected net increase in total student enrollments to the campus as a result of the proposed program. (300 word limit)		
	<i>According to Burning Glass the number of awarded Master's in Environmental Studies has increased by almost 14% since 2013. Our poll of current undergraduate students shows strong demand for an online Master's in Applied Environmental and Sustainability Studies at the University of Kentucky.</i>		
14h	Use table below to estimate student demand for the first five years following implementation.		
	Academic Year	# Degrees Conferred	Majors (headcount) Fall Semester
	2019 - 2020	0	10-12
	2020 - 2021	8-10	10-15
	2021 - 2022	10-12	10-15
	2022 - 2023	12-15	10-15
	2023 - 2024	12-15	10-15
14i	Clearly describe all evidence justifying a new program based on changes in the academic discipline or other academic reasons. (300 word limit)		
	<i>This new program is based on recent nationwide growing interest and increasing numbers of students graduating from programs in Environmental Studies. Nationwide, graduation from undergraduate programs in Environment and Conservation has increased by some 38 percent between 2011-2017 (Chronicle of Higher Education, November 27, 2018). Our benchmarks, such as Ohio State University and the University of Wisconsin-Madison as well as the University of North Carolina-Chapel Hill all offer interdisciplinary and professional MA or MS programs in environmental studies or subsets of environmental studies.</i>		
14j	Has the Council on Postsecondary Education identified similar programs? ²⁰	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," the following questions (14jh1 – 14jh5) must be answered.		
(1)	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	<i>If "Yes," explain: The Master of Science in Environmental Studies offered by Kentucky State University is a face-to-face program that is more narrowly focused on Environmental Science. The proposed Online Master in Applied Environmental and Sustainability Studies is an interdisciplinary program that prepares students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. Students who complete the master's program will leave with skills in environmental studies,</i>		

²⁰ Please contact OSPIE (OSPIE@L.uky.edu) for help with this question.

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<p><i>sustainability, and policy and governance. The master's program offers students the opportunity to develop applied skills such as geographic information systems and mapping, statistics, technical writing, or communication applications for environmental knowledge, including management, marketing, finance, and economics. By offering the degree program online we are able to reach a larger target audience and offer flexibility that is not easily achieved with a face-to-face program.</i></p>			
(2)	Does the proposed program serve a different student population (e.g., students in a different geographic area or nontraditional students) from existing programs? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>If "Yes," explain: <i>In offering the proposed Master of Arts in Applied Environmental and Sustainability Studies online rather than face-to-face we cast a broader net for students, beyond the immediate vicinity of the University of Kentucky and beyond the Commonwealth of Kentucky. Our online offering of the degree also provides additional opportunities for non-traditional students who may not be able to attend on-campus courses.</i></p>			
(3)	Is access to existing programs limited? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>If "Yes," explain: <i>Existing programs are in-person, on-campus format. Our program reaches non-traditional audiences and students outside of the state of Kentucky as well.</i></p>			
(4)	Is there excess demand for existing programs? (150 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<p>If "Yes," explain:</p>			
(5)	Will there be collaboration between the proposed program and existing programs? (150 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<p>If "yes," explain the collaborative arrangements with existing programs. If "no," explain why there is no collaboration with existing programs.</p>			
14k*	Are there similar programs in other Southern Regional Education Board (SREB) states in the nation?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<p>If "Yes," please answer the questions below to demonstrate why this proposed program is needed in addition to the one(s) currently in existence.</p>			
14k. i*	Identify similar programs in other SREB states and in the nation.		
<p>Louisiana State University and the University of Tennessee Chattanooga offer a Master of Science in Environmental Studies, which has a different, more science-based focus.</p>			
14k.ii*	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>If "Yes," explain. (300 word limit)</p>			
<p>Our online master's program has an applied and job readiness focus that provides students with the opportunity to gain applied skills in communication and writing of environmental and sustainability knowledge.</p>			
14k.iii*	Does the proposed program serve a different student population (e.g., students in a different geographic area and non-traditional students) from existing programs?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>If "Yes," explain. (300 word limit)</p>			
<p>We anticipate a large number of our students to be graduates from the University of Kentucky's interdisciplinary majors in Environmental and Sustainability Studies and in Natural Resources and Environmental Sciences. In addition we expect that non-traditional students and life-long learners will be interested in the Online Master's in Applied Environmental and Sustainability Studies.</p>			

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14k.iv*	Is access to existing programs limited? If "Yes," explain. (300 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Access to existing programs is limited by students' ability to attend on-campus courses. Access to existing programs is also limited by the high cost of tuition for these programs.		
14k.v*	Is there excess demand for existing similar programs? If "Yes," explain. (300 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
14k.vi*	Will there be collaboration between the proposed program and existing programs? If "No," explain. (300 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
14l	Would your institution like to make this program available through the Academic Common Market ²¹ ?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
14m	Clearly describe evidence of employer demand or discipline needs. Such evidence may include employer surveys, current labor market analyses, and future human resources projections. Where appropriate, evidence should demonstrate employers' preferences for graduates of the proposed program over persons having alternative existing credentials and employers' willingness to pay higher salaries to graduates of the proposed program. (300 word limit)		
	<i>There is a growing need for employees that can address environmental sustainability issues for companies or organizations, including university systems. Employees are needed to develop strategies for reducing energy costs, promoting environmentally friendly production, business or maintenance practices. Burning Glass data lists 1,736 open job postings nationwide for Sustainability Specialists, with a projected increase in demand for Sustainability Specialits of +8.8 % over the next 10 years. Common job titles for Sustainability Specialists are Water Resources Project Manager, Sustainability Manager, Ehs Environmental & Sustainability Manager III, Sustainability Analyst, Sustainability Specialist.</i>		
14n*	Describe the types of jobs available for graduates, average wages for these jobs, and the number of anticipated openings for each type of jobs at the regional, state, and national levels.		
	<i>Sustainability specialists earn median annual salaries of \$70,874, with 25% earning more than \$89,239 and 75% earning more than \$55,188. Burning Glass predicts an increase in demand for Sustainability Specialists of +8.8% over the next 10 years. Nationwide there were 1,736 open positions.</i>		
	<i>The types of positions open to graduate range from Sustainability Specialists (see above) to related positions such as Project Managers, Alternative Energy Managers, Environmental Compliance Specialists, Energy Efficiency Specialists, Energy Analysts/Auditors, Recycling Coordinators, and Business Continuity Planners/Analysts, among others.</i>		
15. Assessment and Oversight			
15a*	Describe <i>program</i> evaluation procedures for the proposed program. These procedures may include evaluation of courses and faculty by students, administrators, and departmental personnel as appropriate. Program review procedures shall include standards and guidelines for the assessment of student outcomes implied by the program objectives and consistent with the institutional mission. (300 word limit)		
	Projects and assignments from the courses offered in the curriculum will be collected and assessed annually, according to the three-year assessment cycle. The certificate director will convene an assessment committee consisting of 3-4 faculty members who teach courses in the program; they will evaluate student learning outcomes as demonstrated by student artifacts, using a rubric created by the committee to assess the content material of all student learning outcomes. The certificate director will be responsible for collating the		

²¹ Please contact OSPIE (OSPIE@L.uky.edu) for more information.

NEW MASTER'S DEGREE PROGRAM

assessment data and writing the annual assessment report, in collaboration with the assessment committee. The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.

All instructors will use the university teacher course evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement during the biannual faculty merit evaluation report process. The chair will review the TCE results with instructors and provide feedback to the instructors on an annual basis, and discuss self-reflection on a biannual basis.

The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.

15b* Describe how each program-level student learning outcome will be assessed and how assessment results will be used to improve the program. (300 word limit)

Please see attachment 5 for Student Learning Outcome Map

16. Cost and Funding of the Proposed Program²²

16a Will this program require additional resources? Yes No

If "Yes," please provide a brief summary of additional resources that will be needed to implement this program over the next five years. (300 word limit)

16b Will this program impact existing programs and/or organizational units within your institution? (300 word limit) Yes No

If "Yes, briefly describe.

16c Provide adequate documentation to demonstrate sufficient return on investment to the state to offset new costs and justify approval for the proposed program. Note whether the program is predicted to: increase retention rates; increase revenue; attract a new pool of students; meet employment needs in the state; feed into fields that have been shown to be beneficial to the economic needs of the state, etc. (300 word limit)

The program is expected to attract a new pool of students, meet employment needs in the state, and feed into fields that have been shown to be beneficial to the economic needs of the state. Please see section 18 below for total net revenue.

17.* Budget Funding Sources, by Year of Program

All the fields in number 16 are required for the CPE's pre-proposal form. Estimate the level of new and existing resources that will be required to implement and sustain the program using the spreadsheet below. Please answer in terms of dollar amounts. All narratives have a 100-word limit.

Total Resources Available from Federal Sources (Federal sources include grants, earmarks, etc.)		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative/Explanation:						
Total Resources Available from Other Non-State Sources (Non-state sources include		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year

²² For questions about cost and funding of the program, please contact your department chair, business officer, or associate dean for academic affairs.

NEW MASTER'S DEGREE PROGRAM

philanthropies, foundations, individual donors, etc.)					
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					
State Resources (State sources include general fund revenue, grants, pass-thru funds, etc.)	1st Year	2nd Year	3rd Year	4th Year	5th Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					
Internal (The source and process of allocation and reallocation should be detailed, including an analysis of the impact of the reduction on existing programs and/or organization units.)²³:	1st Year	2nd Year	3rd Year	4th Year	5th Year
(New) Allocated Resources	100,000	0	0	0	0
(Existing) Reallocated Resources	0	0	0	0	0
Narrative/Explanation:	The Office of Teaching, Learning and Academic Innovation awarded \$1000,000 in funding to the online MA in Applied Environmental and Sustainability Studies.				
Student Tuition (Describe the impact of this program on enrollment, tuition, and fees.)	1st Year	2nd Year	3rd Year	4th Year	5th Year
New	120,550	229,708	258,980	276,629	284,928
Existing	0	0	0	0	0
Narrative/Explanation:	Tuition dollars is based on the projected enrollment of 12 students by year 5.				
Total Funding Sources	1st Year	2nd Year	3rd Year	4th Year	5th Year
Total New	220,550	229,708	258,980	276,629	284,928
Total Existing	0	0	0	0	0
TOTAL FUNDING SOURCES	220,550	229,708	258,980	276,629	284,928
18. Breakdown of Program Expenses/Requirements⁴					
(Please note – all the fields in number 17 are required for the CPE's pre-proposal form.)					
Staff: Executive, Administrative & Managerial (Include salaries and whether new hires will be part time or full time.)	1st Year	2nd Year	3rd Year	4th Year	5th Year
New	0	0	0	0	0

²³ The source and process of allocation and reallocation should be detailed, including an analysis of the impact of the reduction on existing programs and/or organizational units.

NEW MASTER'S DEGREE PROGRAM

Existing	0	0	0	0	0
Narrative/Explanation ²⁴ :					
Other Professional (Include salaries.)					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	80,000	82,400	84,872	87,418	90,041
Existing	0	0	0	0	0
Narrative/Explanation: The Department of Geography will hire a post-doctoral scholar to develop the online course content for the new ENS prefix courses.					
Faculty (Include salaries and whether new hires will be part time or full time.)					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0
Existing	11,000	11,000	11,000	11,000	11,000
Narrative/Explanation ²⁵ : No new faculty will be hired.					
Graduate Assistants (Include salaries and/or stipends.)²⁶					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
Student Employees (Include salaries and/or stipends.)					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
Equipment and Instructional Materials					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
Library (Include new journal subscriptions, collections, and electronic access.)					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0
Existing	0	0	0	0	0

²⁴ Discuss whether new hires will be full-time or part-time.

²⁵ If new hires are involved, explain whether new hires will be full-time or part-time.

²⁶ Identify the number of assistantships/stipends to be provided; Include the level of support for each.

NEW MASTER'S DEGREE PROGRAM

Narrative Explanation/Justification:						
Contractual Services						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						
Academic and/or Student Services						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						
Other Support Services						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						
Faculty Development (Include travel, conference fees, consultants, etc.)						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						
Assessment (Include personnel, software tools, data collection tools, survey administration, outside consulting services, etc.)						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						
Student Space and Equipment						
		1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	0	0	0	0	0
Existing	0	0	0	0	0	0
Narrative Explanation/Justification:						

NEW MASTER'S DEGREE PROGRAM

Other	1st Year	2nd Year	3rd Year	4th Year	5th Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
Total Expenses/Requirements	1st Year	2nd Year	3rd Year	4th Year	5th Year
New	80,000	82,400	84,872	87,418	90,041
Existing	11,000	11,000	11,000	11,000	11,000
<u>TOTAL</u> Program Budgeted Expenses/Requirements:					
GRAND TOTAL	1st Year	2nd Year	3rd Year	4th Year	5th Year
Total Funding Sources	<u>220,550</u>	<u>229,708</u>	<u>258,980</u>	<u>276,629</u>	<u>284,928</u>
Total Expenses/Requirements	<u>91,000</u>	<u>93,400</u>	<u>95,872</u>	<u>98,418</u>	<u>101,041</u>
TOTAL NET COST:	<u>129,550</u>	<u>136,308</u>	<u>163,108</u>	<u>178,211</u>	<u>183,887</u>

19. Course Descriptions

19a Program Core Courses (includes pre-major and pre-professional courses)

Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)
ENS 601	<i>Environment and Sustainability: Issues and Ideas</i>
ENS 602	<i>Environmental and Sustainability Policy and Governance</i>
ENS 603	<i>Communicating Environmental and Sustainability Studies</i>
ENS 695	<i>Research in Environmental and Sustainability Studies</i>
ENS 696	<i>Reporting Research in Environmental and Sustainability Studies</i>
ENS 697	<i>Internship in Environmental and Sustainability Studies I</i>
ENS 698	<i>Internship in Environmental and Sustainability Studies II</i>

19b Program Guided Electives Courses (for the major)

Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)
STA 570	<i>Basic Statistical Analysis</i>
STA 674	<i>Regression Analysis and Design of Experiments</i>
STA 677	<i>Applied Multivariate Methods</i>
LA/NRE 556	<i>Contemporary Geospatial Applications for Land and Analysis</i>
ENS 699	<i>Independent Study</i>
MAP 671	<i>Introduction to Mapping</i>
ANT 680	<i>Business and Organizational Cultures</i>
ANT 681	<i>Health Care Inequalities</i>

The logo consists of a white rectangular area with rounded corners, centered within a larger blue rounded rectangular border. The text "OSPIE Approval" is centered within the white area.

OSPIE Approval

From: [Pearson, RaeAnne](#)
To: [Harmon, Camille](#)
Subject: Applied Environmental and Sustainability Studies , MA, Master of Arts (03.0103).
Date: Tuesday, February 12, 2019 12:17:48 PM

Dear Camille Harmon ,

Thank you for submitting a Notification of intent for **Applied Environmental and Sustainability Studies , MA, Master of Arts (03.0103)**.

My email will serve 2 purposes: 1.) Next steps for SACSCOC, and 2.) Verification and notification that you have contacted OSPIE—a Senate requirement for proposal approval.

1. **Next steps for SACSCOC:** None required
2. **Verification that OSPIE has reviewed the proposal:** Based on the documentation presented the proposed program does not constitute a substantive change as defined by the University or SACSCOC, the university's regional accreditor. Therefore, no additional information is required by the Office of Strategic Planning & Institutional Effectiveness at this time. The proposed program change(s) may move forward in accordance with college and university-level approval processes.

IMPORTANT: *Certificates (undergraduate and graduate) will be added to the CPE Inventory once they have been approved by the University Senate. For degree programs, an NOI will be submitted by the Office of Strategic Planning and Institutional Effectiveness to CPE and you will need to work closely with our office to ensure that your proposal meets all external CPE requirements and deadlines.*

Should you have any questions or concerns about UK's substantive change policy and its procedures, please do not hesitate to contact our office.

Office of Strategic Planning & Institutional Effectiveness
University of Kentucky
[Visit the Office of Strategic Planning and Institutional Effectiveness Website](#)

2d. Benchmarks

2d. University of Kentucky Benchmarks/National and Regional Benchmarks Online Master's in Applied Environmental and Sustainability Studies

University of Kentucky Benchmarks	Graduate Program	
University of California-Davis	no	
University of Iowa	no	
Michigan State University	no	
University of Missouri-Columbia	no	
University of Arizona	no	
University of Minnesota-Twin Cities	no	
Ohio State University-Main Campus	Yes- Master in Environment and Natural Resources	36 credit hours/ face-to-face
University of Michigan-Ann Arbor	Yes- Master in Natural Resources and Environment	42 credit hours/ face-to-face
University of Wisconsin-Madison	Yes- Master in Environment and Resources	30 credit hours/face-to-face
University of North Carolina at Chapel Hill		
	no	
University of Florida	no	

Regional Benchmarks	Graduate Program	Credit Hours
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The following institutions were identified by the Council on Postsecondary Education as having a Master's Degree using the CIP Code 03.0103

Kentucky State University	Master in Environmental Studies	36 credit hours/ face-to-face
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The Master of Science in Environmental Studies offered by Kentucky State University is a face-to-face program that is more narrowly focused on Environmental Science. The proposed Online Master in Applied Environmental and Sustainability Studies is an interdisciplinary program that prepares students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. The proposed Master in Applied Environmental and Sustainability Studies encourages a liberal arts approach by drawing from the humanities, social sciences, and mathematics and natural science disciplines. By taking coursework across disciplines students develop skills required for success in the field. Those skills may include critical thinking, independent learning, oral and written communication, problem solving, academic knowledge in environmental issues; an understanding of sustainability as it pertains to healthy, productive, and equitable quality of life for future generations. By offering the degree program online we are able to reach a larger target audience and offer flexibility that is not easily achieved with a face-to-face program.

National Benchmarks	Graduate Program	Credit Hours
---------------------	------------------	--------------

The following institutions were identified by Burning Glass as having an online Master's Degree using CIP Code 03.0103

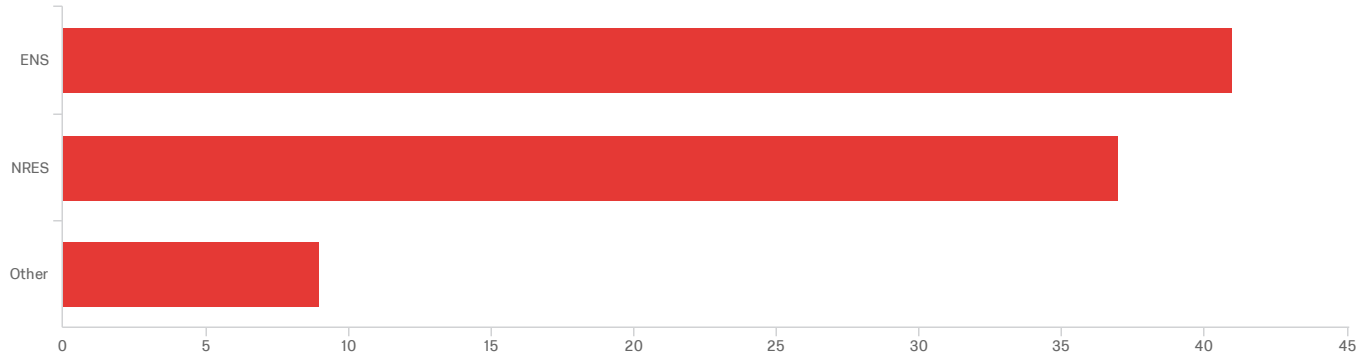
American Public University System	Environment and Policy Management	36 credit hours
Universidad Internacional Iberoamericana	Environmental Management and Audits	46 credit hours
Arizona State University-Skysong	Environment and Resource Management	30 credit hours
Prescott College	Environmental Studies	36 credit hours
University of Massachusetts-Lowell	According to their webpage this is a face-to- face program	30 credit hours
Johns Hopkins University	Environmental Science and Policy	30 credit hours

Default Report

Interest in MA in Applied Environmental and Sustainability Studies

February 4, 2019 1:52 PM MST

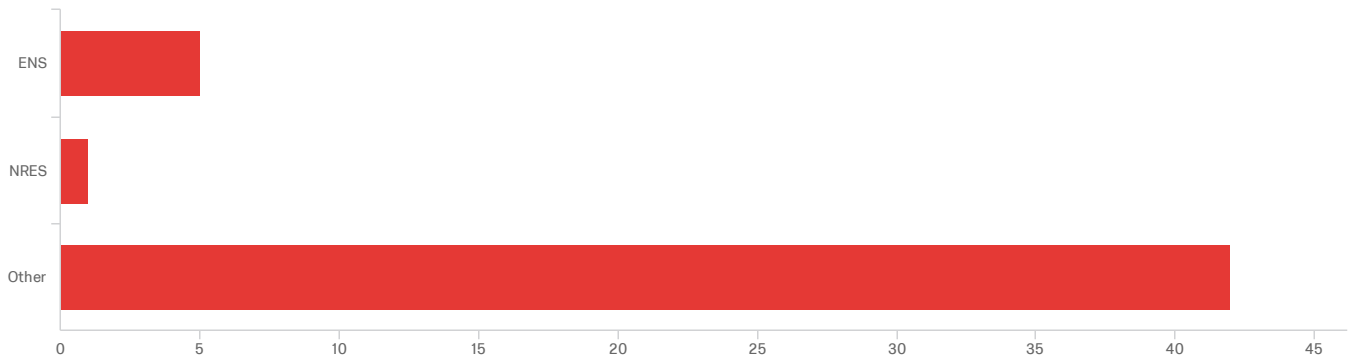
Q1 - What is your current undergraduate major?



#	Field	Choice Count
1	ENS	47.13% 41
2	NRES	42.53% 37
3	Other	10.34% 9
		87

Showing rows 1 - 4 of 4

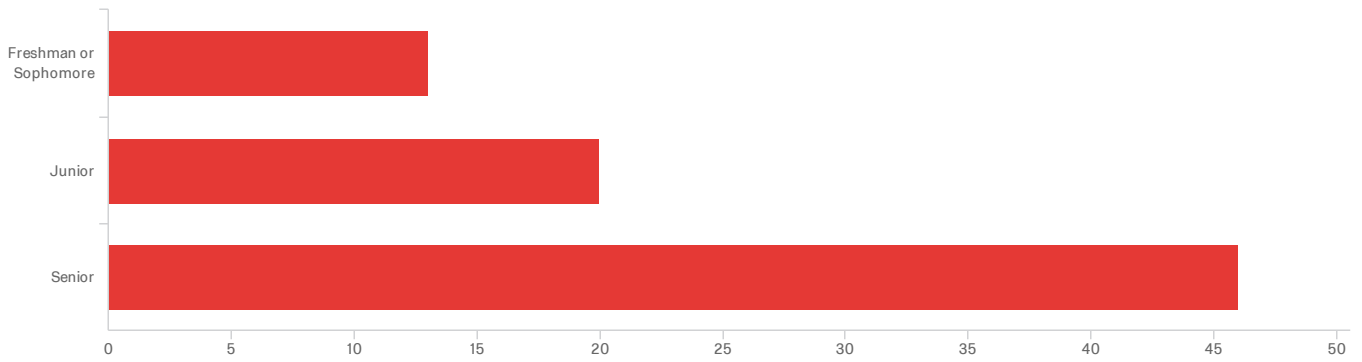
Q2 - Are you a minor in one of the following?



#	Field	Choice Count
1	ENS	10.42% 5
2	NRES	2.08% 1
3	Other	87.50% 42
		48

Showing rows 1 - 4 of 4

Q3 - What is your current student status?



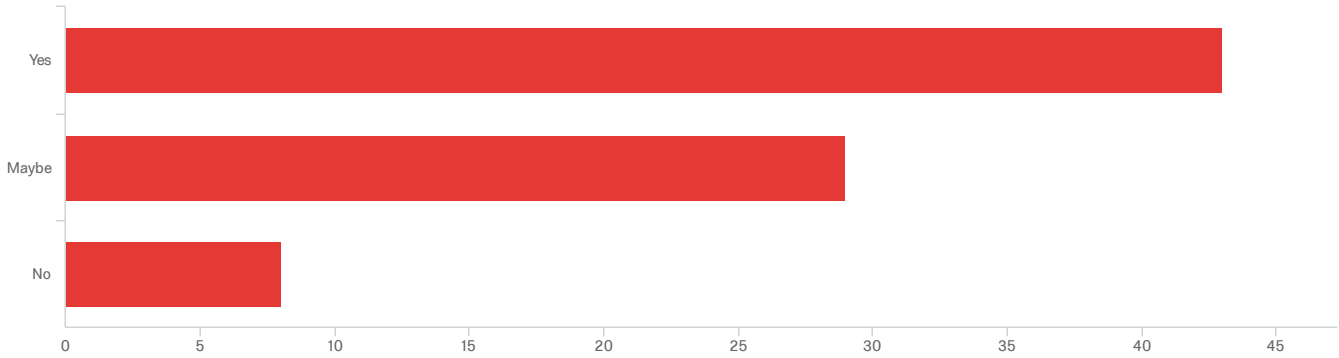
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your current student status?	1.00	3.00	2.42	0.76	0.57	79

#	Field	Choice Count
1	Freshman or Sophomore	16.46% 13
2	Junior	25.32% 20
3	Senior	58.23% 46
		79

Showing rows 1 - 4 of 4

Q4 - Would you be interested in a Master's in Applied Environmental and Sustainability

Studies at UK?

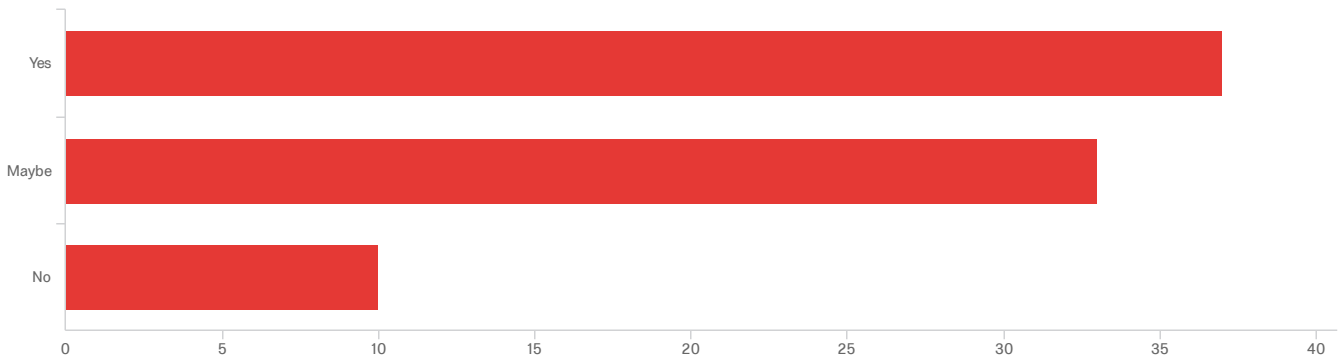


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be interested in a Master's in Applied Environmental and Sustainability Studies at UK?	1.00	3.00	1.56	0.67	0.45	80

#	Field	Choice Count
1	Yes	53.75% 43
2	Maybe	36.25% 29
3	No	10.00% 8
		80

Showing rows 1 - 4 of 4

Q5 - Would you be interested in earning a Master's degree online?

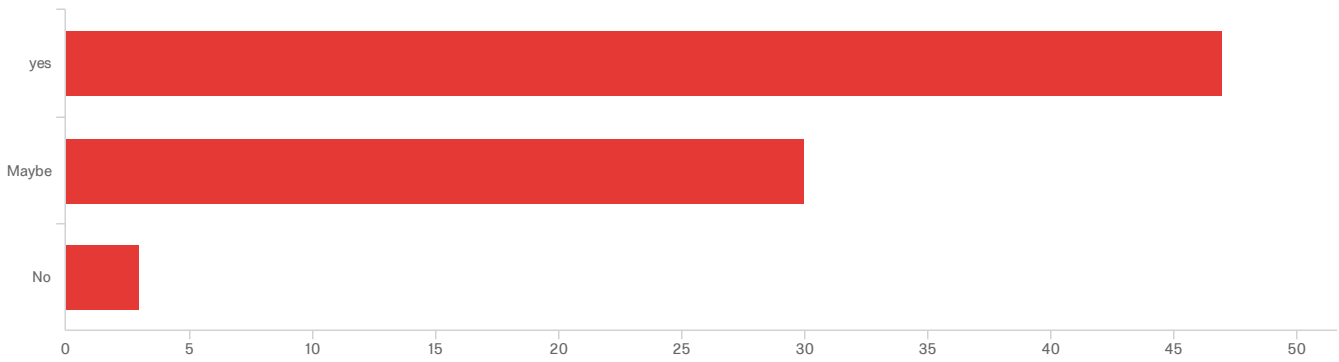


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be interested in earning a Master's degree online?	1.00	3.00	1.66	0.69	0.47	80

#	Field	Choice Count
1	Yes	46.25% 37
2	Maybe	41.25% 33
3	No	12.50% 10
		80

Showing rows 1 - 4 of 4

Q6 - Would you be interested in pursuing a Master's degree as a part-time option?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Would you be interested in pursuing a Master's degree as a part-time option?	1.00	3.00	1.45	0.57	0.32	80

#	Field	Choice Count
1	yes	58.75% 47
2	Maybe	37.50% 30
3	No	3.75% 3
		80

Showing rows 1 - 4 of 4

Q7 - Please leave any additional information that you would like us to know in the space provided below.

End of Report

Source: Labor Insight Jobs (Burning Glass Technologies)

Related Jobs - Sustainability Specialist

Addresses environmental sustainability issues for companies or organizations, including university systems. Develops strategies for reducing energy costs, promotes environmentally friendly production, business or maintenance practices.

Common job titles: Water Resources Project Manager, Sustainability Manager, Ehs Environmental & Sustainability Manager III, Sustainability Analyst, Sustainability Specialist

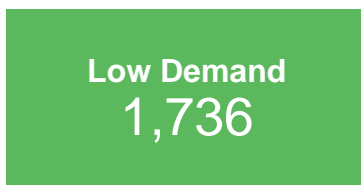
Active Selections: Nationwide, Sustainability Specialist

Sustainability Specialist at a Glance

Salary



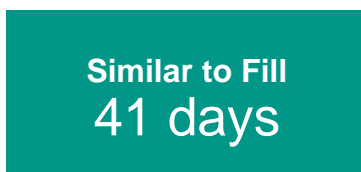
Job Postings Last 12 Months



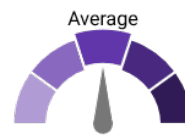
Projected Growth 10 Years



Time To Fill

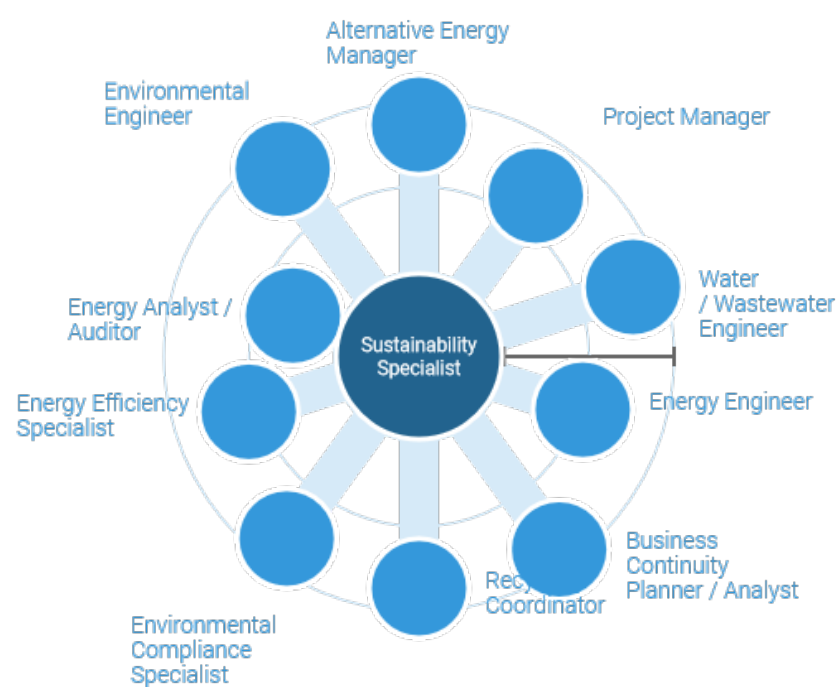


Location Quotient



Source: Bureau of Labor Statistics (Projected Growth) and Burning Glass analysis

Related Jobs



4c. Course List

4c Courses from other educational units

LA/NRE 556	<p>Contemporary Geospatial Applications for Land and Analysis Advance concepts in data base analysis, model development, and ancillary functions in geographic information systems. Lecture, twohours; laboratory, four hours per week</p>	3 credit hours
STA 570	<p>Basic Statistical Analysis Introduction to methods of analyzing data from experiments and surveys; the role of statistics in research, statistical concepts and models; probability and distribution functions; estimation; hypothesis testing; regression and correlation; analysis of single and multiple classification models; analysis of categorical data.</p>	3 credit hours
STA 674	<p>Regression Analysis and Design of Experiments Course begins with an applied regression module that emphasizes analysis and interpretation of real data, and statistical computing. Second part of course focuses on principles and implementation of experimental design for scientific research purposes. Standard designs presented along with the proper kinds of analysis for each. Continued emphasis on real data and statistical computing using R and/or SAS.</p>	3 credit hours
STA 677	<p>Applied Multivariate Methods Survey of multivariate statistical techniques. The multivariate normal distribution; the general linear model; general procedures for parameter estimation and hypothesis testing in the multivariate case; Hotelling's T², multivariate analysis of variance and covariance; structural models for the covariance matrix; utilization of existing computer programs.</p>	3 credit hours
ANT 680	<p>Business and Organizational Anthropology The course introduces students to the various applications of anthropological theory and ethnographic research methods in contemporary institutional settings, including businesses, government, and non-governmental organizations. Students will investigate the concept of organization from an anthropological perspective in order to understand how organizational forms manifest in different social and cultural contexts and what cultural patterns and processes shape them. Students will learn about the growing field of business anthropology in which anthropologists apply their knowledge, skills, and research methods to improve business performance, competitiveness, and communication. Students will explore how business anthropologists help organizations develop culturally appropriate ways of working with suppliers, partners, and consumers and promote smooth working relationships among employees from different cultural contexts. Students will also critically examine the meaning and usage of core concepts such as culture, design, social organization, consumption, globalization, ethnography, business, branding and marketing. Students will have opportunities for hands-on, qualitative research involving interviews and participant observation. They will learn to effectively analyze their research data and relate it to the theoretical and analytical frameworks developed by business and organizational anthropologists.</p>	3 credit hours
ANT 681	<p>Health Care Inequalities This course introduces students to anthropological theory and ethnographic research methods from the perspective of health inequalities and cultural aspects of health care systems. Students will investigate the concepts of health, disease and illness from an anthropological perspective in order to study how cultural and structural inequalities influence diverse experiences of health care institutions and practices. Students will develop skills in cross-cultural analysis to understand how factors such as race, gender, sexuality, and socio-economic status affect health outcomes, access to care, and the nature of patient-professional interactions in diverse social and cultural contexts. Students will critically examine Western biomedical interventions and practices as culturally embedded rather than universal or existing outside of culture. Students will also reflect on their own cultural and personal beliefs about the causes of and responses to illness. Students will explore the practical applications of medical anthropology for understanding the strengths and limitations of how concepts such as culture, compliance and cultural competency shape health care systems and practices, and how an anthropological approach can improve patient-professional relationships and health outcomes. Students will have opportunities for evaluating scholarly literature, critically analyzing representations of health and illness in mass media and popular culture outlets, and hands-on qualitative research involving interviews. They will learn to effectively analyze their research data and relate it to the theoretical and analytical frameworks developed by medical anthropologists.</p>	3 credit hours
MFS 613	<p>Sustainability, Ethics, and Leadership in Manufacturing Organizations This course is intended to provide future manufacturing managers and leaders a basic understanding of important theories and practices necessary to successfully manage and lead teams to achieve manufacturing organizational objectives. The course is organized into several modules. The first module will focus on developing an understanding and capability to approach ethical and sustainability concerns confronted by manufacturing organizations. This will include coverage of tools to help identify and address societal and environmental obligations of manufacturing organizations and issues confronting them that span multiple cultures and nations. Because people are one of the most important resources in any organization, the second and third modules will address organizational behavior (OB) and individual effectiveness. OB theories and practices that can be used to increase the capability to observe, understand and manage people's behavior will be covered. The last module considers safety and ergonomics as they relate to manufacturing organizations. Coverage will include tools and techniques that can be used to analyze the manufacturing workplaces and ensure its ergonomic design as well as an overview of the current state of occupational safety and health regulations</p>	3 credit hours
WRD 612	<p>Ethical and Legal Issues in Technical Writing Study of legal and ethical issues faced by technical writers</p>	3 credit hours
WRD 614	<p>Visual Rhetoric and Persuasion Study of visual methods or persuasion in technical and professional writing</p>	3 credit hours
WRD 702	<p>Professional and Technical Writing Study in advanced topics in professional and technical writing. Special emphasis on theoretical and practical issues in professional and technical writing. Prereq: Admission to the graduate program or consent of instructor</p>	3 credit hours

5. Assessment

6. Online Master's in Applied Environmental and Sustainability Studies

ASSESSMENT PLAN- February 2019

Introduction:

This assessment plan is for the Online Master's in Applied Environmental and Sustainability Studies offered in the Department of Geography.

Mission Statement:

The Online Master's in Applied Environmental and Sustainability Studies is committed to preparing students to understand sustainability as it pertains to healthy, productive, and equitable quality of life for future generations.

Basic Assessment Approach:

All outcomes will be assessed within a three-year cycle. Please see attached curriculum map and assessment instruments.

Assessment Oversight and Resources:

The program director will also serve as the Director of Graduate Studies (DGS) and will act as assessment coordinator. It is the responsibility of the assessment coordinator to monitor the activities of assessment that occur in the program. The assessment coordinator will convene an assessment committee annual for the assessment of student artifacts, and will assemble the results into an annual assessment report, which will be communicated to the faculty of record and delivered to the college. The program director will discuss the results of the assessment with the faculty of record on an annual basis.

Program-Level Student Learning Outcomes:

1. Students will be able to identify environmental challenges that face the world and demonstrate the implications and limitations for future generation through research. (Integrative Knowledge)
2. Students will be able to demonstrate an understanding of the environmental, social, and economic dimensions of sustainability studies through data collection and analysis. (Specialized knowledge- Students demonstrate an understanding of a specialization or major field of study. Learning outcomes are specific to the major or specialization.)
3. Students will be able to differentiate and evaluate the strengths and weaknesses of different methodologies and techniques to address environmental challenges. (Intellectual skills)
4. Students will be able to apply knowledge and skills to address problems through scientific inquiry, creative and other methods, both individually and collaboratively. (Applied Learning)
5. Students will be able to demonstrate an understanding of environmental and sustainability studies, and look beyond individual and local interests to identify and evaluate our social and economic responsibilities. (Civic Learning)

Curriculum Map for Online Master's in Applied Environmental and Sustainability Studies:

(1=Introduce; 2=Reinforce; 3=Emphasize)

Course	SLO #1: Integrative Knowledge	SLO # 2: Specialized knowledge	SLO # 3: Intellectual skills	SLO # 4: Applied Learning	SLO #5: Civic Learning
ENS 601 Environment and Sustainability: Issues and Ideas	1	1	2	1	2
ENS 602 Environment and Sustainability Policy and Governance	2	2	3	2	2
ENS 603 Communicating Environmental Knowledge	3	3	3	3	3
Applied Environmental and Sustainability Studies Skills Course	1	2	2	1	1
Applied Environmental and Sustainability Studies Skills Course	1	3	2	1	1
Capstone Courses (ENS 697/ENS 698 or ENS 695/ENS 696)	3	3	3	3	3
Applied Environmental and Sustainability Studies Elective	2	2	2	2	2
Applied Environmental and Sustainability Studies Elective	2	2	2	2	2
Applied Environmental and Sustainability Studies Elective	2	2	2	2	2

Assessment Measures and Methods:

Direct Methods:

Assignments will be collected in all courses offered in the curriculum. The program director will collect the assignments and share with the assessment committee by April 30th every year. The Assessment Coordinator will convene a committee to review the targeted Student Learning Outcomes for that year. Members of the assessment committee will be drawn from the faculty of record.

All outcomes are assessed using rubrics created by the program program faculty for the targeted Student Learning Outcome. Students must receive a 3 or 2 on the assignment to consider the learning outcome met.

Data Collection and Review:

Projects and assignments from the courses offered in the curriculum will be collected and assessed annually, according to the three-year assessment cycle. The program director will convene an assessment committee consisting of 3-4 faculty members who teach courses in the program; they will evaluate student learning outcomes as demonstrated by student artifacts, using a rubric created by the committee to assess the content material of all SLO's. The program director will be responsible for collating the assessment data and writing the annual assessment report, in collaboration with the assessment committee. The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.

Assessment Cycle and Data Analysis:

Assessment of student learning takes place throughout the program and occurs in all courses. Artifacts of course assessment are maintained by the faculty teaching those courses for one year after the completion of the course. Program-level assessment data are gathered strategically according to the assessment plan. The program will follow a three-year assessment cycle; one or two student learning outcomes will be assessed each year according to this cycle.

Online Master's in Applied Environmental and Sustainability Studies 2019-2022 SLO Reporting Cycle				
Outcome Number	Stated Student Learning Outcome	Cycle	Academic Year	Reporting Year
Outcome 1:	Identify environmental challenges that face the world and demonstrate the implications and limitations for future generation through research. (Rubric to be created by program faculty)	Year 1	2019-20	October 31, 2020
Outcome 2:	Demonstrate an understanding of the environmental, social, and economic dimensions of sustainability studies through data collection and analysis. (Rubric to be created by program faculty)	Year 1	2019-20	October 31, 2020
Outcome 3:	Differentiate and evaluate the strengths and weaknesses of different methodologies and techniques to address environmental challenges. (Rubric to be created by program faculty)	Year 2	2020-21	October 31, 2021

Outcome 4:	Apply knowledge and skills to address problems through scientific inquiry, creative and other methods, both individually and collaboratively. (Rubric to be created by program faculty)	Year 2	2020-21	October 31, 2021
Outcome 5:	Demonstrate an understanding of environmental and sustainability studies, and look beyond individual and local interests to identify and evaluate our social and economic responsibilities. (Rubric to be created by program faculty)	Year 3	2021-22	October 31, 2022

Teaching Effectiveness:

All instructors will use the university teacher course evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement during the biannual faculty merit evaluation report process. The chair will review the TCE results with instructors and provide feedback to the instructors on an annual basis, and discuss self-reflection on a biannual basis.

Post-Graduate Success:

Our program will look at data provided by the university alumni survey. The program will attempt to stay in contact with former students through an alumni mailing list, to be initiated at the inception of the program. Periodic surveys of alumni will be taken through this venue.

8. Curriculum

Online Master's in Applied Environmental and Sustainability Studies Curriculum

Core Courses (9 Credit Hours)

ENS 601	Environment and Sustainability Studies: Issues and Ideas	3 credit hours
ENS 602	Environment and Sustainability Policy and Governance	3 credit hours
ENS 603	Communicating Environmental Knowledge	3 credit hours

Skills Courses (6 Credit Hours)

Students must take a total of 6 credit hours from two of the skills courses listed below.

LA/NRE 556	Contemporary Geospatial Applications for Land and Analysis	3 credit hours
MAP 671	<i>Introduction to Mapping</i>	3 credit hours
STA 570	Basic Statistical Analysis	3 credit hours
STA 674	Regression Analysis and Design of Experiments	3 credit hours
STA 677	Applied Multivariate Methods	3 credit hours

Capstone/Internship (6 Credit Hours)

Students must complete one of two options to satisfy the non-thesis requirement for the Master's in Applied Environmental and Sustainability Studies. All students will be required to complete a one-hour oral exam.

Option #1 Internship

Complete 6 credit hours of internship coursework

ENS 697	Internship in Environmental and Sustainability Studies I	3 credit hours
ENS 698	Internship in Environmental and Sustainability Studies II	3 credit hours

Option #2 Capstone

Complete 6 credit hours through a capstone research project and report

ENS 695	Research in Environmental and Sustainability Studies	3 credit hours
ENS 696	Reporting Research in Environmental and Sustainability Studies	3 credit hours

Elective Courses (9 Credit Hours)

Students must take an additional 9 credit hours from the approved list of courses below. Other courses at the 600-level and above that relate to environmental and sustainability studies may be used to satisfy this requirement with the permission of the program director. Students may only count 6 credit hours of ENS 605 (under different subtitles) or ENS 699 (up to 3 credit hours) towards this requirement.

ANT 680	Business and Organizational Cultures	3 credit hours
ANT 681	Health Care Inequalities	3 credit hours
ENS 605	Seminar in Environmental and Sustainability Studies: Subtitle Required	3-6 credit hours
ENS 699	Independent Study	3 credit hours
MFS 613	Sustainability, Ethics, and Leadership in Manufacturing Organizations	3 credit hours
WRD 612	Ethical and Legal Issues in Technical Writing	3 credit hours
WRD 614	Visual Rhetoric and Persuasion	3 credit hours
WRD 702	Professional and Technical Writing	3 credit hours

Total Credit Hours 30



Letters

March 7, 2019

Dear Graduate Council,

I am pleased to express the college's strongest support of the proposed online Master of Arts Degree in Applied Environmental and Sustainability Studies in the Department of Geography. The Applied Environmental and Sustainability Studies Degree Program will provide students with a breadth of knowledge indicative of a liberal arts education. The interdisciplinary program will prepare students to analyze complex environmental problems from a variety of perspectives and apply their findings to facilitate change. Students will have the opportunity to develop applied skills such as geographic information systems and mapping, statistics, technical writing, or communication applications for environmental knowledge, including management, marketing, finance, and economics. The enclosed proposal has been carefully vetted by the college's Education Policy Committee in close consultation with the Dean's office.

The proposed Applied Environmental and Sustainability Studies Degree Program will utilize the strengths of the outstanding faculty in the College of Arts and Sciences, the College of Agriculture, Food and Environment, and the College of Engineering.

An online master's degree in Applied Environmental and Sustainability Studies will attract a broad spectrum of interest from students at the University of Kentucky, and workplace professionals who are seeking an advanced degree to strengthen professional opportunities. Employers in management and industry, corporate, government, and non-government agencies, regularly look for candidates who can recognize and assess complex environmental and sustainability problems. They are looking for candidates who can communicate issues related to environmental and sustainability policies, management, and solutions.

In terms of additional resources required to offer the master's degree, no additional faculty or staff will be needed. The College of Arts and Sciences is committed to covering the administrative stipend for the director of the program until the department is able to generate enough money to cover the cost.

The College of Arts and Sciences fully supports the proposed Master of Arts Degree in Applied Environmental and Sustainability Studies in the Department of Geography.

Sincerely,



Mark Lawrence Kornbluh
Dean

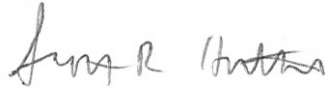
see blue.

March 8, 2019

Dear Graduate Council,

On behalf of the faculty of the College of Arts and Sciences, the Education Policy Committee discussed and approved the proposed online Master of Arts Degree in Applied Environmental and Sustainability Studies 8:0:1 on Tuesday, March 5, 2019.

Sincerely,



Scott Hutson
Chair, Education Policy Committee

February 11, 2019



University of Kentucky
Department of Geography
817 Patterson Office Tower
Lexington, KY 40506-0027
P: 859-257-2931
F: 859-257-6277
geography.as.uky.edu

To Whom It May Concern:

This letter confirms that all faculty members in the Department of Geography were consulted via email and voted on February 8, 2019 (19:0:1; with two additional faculty on leave) in support of the creation of an online Graduate Certificate and MA Program in Applied Environmental and Sustainability Studies that will use the ENS designator and be housed in the Department of Geography.

Sincerely,

A handwritten signature in blue ink that reads "Patricia Ehrkamp".

Patricia Ehrkamp
Professor and Chair



University of Kentucky
College of Arts and Sciences
*Environmental and Sustainability
Studies Program*

817 Patterson Office Tower
Lexington, KY 40506-0027
P: 859-257-2931
F: 859-257-6277
ens.as.uky.edu

Professor Patricia Ehrkamp
Department of Geography
University of Kentucky
817 Patterson Office Tower
Lexington, KY 40506

Dear Professor Ehrkamp,

February 7, 2019

On February 4, 2019, the Environmental and Sustainability Studies Program Faculty met and voted 9:0 in support of creating an online MA and graduate certificate in Applied Environmental and Sustainability Studies proposed by the Department of Geography that will use the ENS designator.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Betsy A. Beymer-Farris'.

Betsy A. Beymer-Farris, PhD
Director, Environmental and Sustainability Studies Program
Assistant Professor, Department of Geography
University of Kentucky
849 Patterson Office Tower
Lexington, Kentucky USA 40506-0027

February 5, 2019

Professor Patricia Ehrkamp
Department of Geography
College of Arts and Sciences
University of Kentucky

December 11, 2018

Dear Professor Ehrkamp,
At our faculty meeting on Friday January 25th, 2019, the anthropology faculty of record discussed and approved unanimously (17-0) the inclusion of ANT 680: Business and Organizational Cultures and ANT 681: Health Care Inequalities, as electives in the proposed MA in Applied Environmental and Sustainability Studies.

Please let me know if you need a copy of our meeting minutes, which document this approval.

Sincerely,



Lisa Cliggett, PhD
Chair, and Professor of Anthropology

office phone: 859-257-2796
email: Lisa.Cliggett@uky.edu



University of Kentucky
College of Arts and Sciences

311 Multidisciplinary
Science Building
Lexington, KY 40536-0082
P: 859-257-6115
<https://stat.as.uky.edu>

Dear Patricia,

As Department Chair, this letter confirms that the Statistics faculty were consulted and approved (12-0) the inclusion of STA 570, STA 674, and STA 677 on 12/5/18 as electives in the proposed Online Master's in Applied Environmental and Sustainability Studies.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Arnold J. Stromberg', written over a blue diagonal line.

Dr. Arnold J. Stromberg
Professor and Chair

see blue.

An Equal Opportunity University



University of Kentucky
College of Agriculture, Food and Environment

March 7, 2019

To: Mark Kornbluh, Dean, College of Arts and Sciences

From: Nancy Cox, Dean, College of Agriculture, Food and Environment

Subject: Applied Environmental and Sustainability Studies Master's Degree and Graduate Certificate

The College of Agriculture, Food and Environment is pleased to support the proposal for the online Applied Environmental and Sustainability Studies Master's Degree and Graduate Certificate in the Department of Geography. The online interdisciplinary degree program and certificate allows students to complete skills in critical thinking, independent learning, oral and written communication, problem solving, academic knowledge in environmental issues; an understanding of sustainability as it pertains to healthy, productive, and equitable quality of life for future generations.

The Applied Environmental and Sustainability Studies Master's Degree and Graduate Certificate will increase opportunities for employment after graduation. Students will attain skills in environmental studies, sustainability, and policy and governance.

The proposed online Applied Environmental and Sustainability Studies Master's Degree and Graduate Certificate will utilize the strengths of the outstanding faculty in the College of Agriculture, Food and Environment's Department of Landscape Architecture and Natural Resources and Environmental Science interdisciplinary program.

The College of Agriculture, Food and Environment fully supports the proposed online Applied Environmental and Sustainability Studies Master's Degree and Graduate Certificate in the Department of Geography.

Sincerely,

A handwritten signature in cursive script that reads "Nancy M. Cox".

Nancy M. Cox
Dean, University of Kentucky
College of Agriculture, Food
and Environment

see blue.

February 7, 2019

Patricia Ehrkamp
Professor and Chair
Department of Geography
University of Kentucky
817 Patterson Office Tower
Lexington KY 40506-0027

Dear Patricia,

The Landscape Architecture faculty met on Tuesday, February 5, 2019 and voted unanimously to support the inclusion of an online version of LA/NRE 556 as an elective course choice in the proposed Master of Arts in Applied Environmental and Sustainability Studies.

My Best Regards,



Ned Crankshaw, FASLA
Professor and Chair
Department of Landscape Architecture



March 8, 2019

Patricia Ehrkamp, Chair
Department of Geography
College of Arts and Sciences

Dear Patricia,

On February 4, 2019, the members of the Steering Committee (SC) of the interdisciplinary Natural Resources and Environmental Science (NRES) BS program in CAFE were queried via email regarding the inclusion of NRE 556 – Contemporary Geospatial Applications for Land Analysis, taught by Dr. Brian Lee, as an optional course in the online Applied Environmental and Sustainability Studies MA program. On March 8, 2019, the NRES SC members approved the inclusion of this course in the Graduate Certificate of the same name.

Dr. Lee has taught this course for about eight years, with enrollment from students in multiple majors, including Biosystems Engineering, Earth and Environmental Science, Plant and Soil Science, Public Health, Geography, Forestry, and some undergraduate students in NRES, for whom the course serves as an option within the Geospatial Analysis area of concentration. Inclusion of this course in the online Applied Environmental and Sustainability Studies MA could help to build additional online advanced degree options for students across these programs.

Eleven of the 13 NRES SC members responded to both inquiries, all in the affirmative, signaling approval of this course in the ENS MA by the NRES Steering Committee.

Sincerely,

A handwritten signature in blue ink that reads 'Mary A. Arthur'.

Mary A. Arthur, PhD
Professor of Forest Ecology
Department of Forestry and Natural Resources

February 7, 2019

Dear Professor Ehrkamp:

I am writing to confirm Writing, Rhetoric, and Digital Studies' support to include the following online courses as electives for the proposed MA in Applied Environmental and Sustainability Studies:

WRD 612 Ethical and Legal Issues in Technical Writing

WRD 614 Visual Rhetoric and Persuasion

WRD 702 Professional and Technical Writing

The faculty met on February 6, 2019 and voted unanimously to support the courses' inclusion.

Sincerely,



Jeff Rice
Chair, Writing, Rhetoric and Digital Studies
Martha B. Reynolds Professor in Writing, Rhetoric, and Digital Studies
University of Kentucky



University of Kentucky
College of Engineering
Department of Mechanical Engineering

March 8, 2019

Patricia Ehrkamp
Professor and Chair
Department of Geography
University of Kentucky

Dear Dr. Ehrkamp:

The Mechanical Engineering faculty have approved using MFS 613 as an elective course in the proposed MA degree program in Applied Environmental and Sustainability Studies at our faculty meeting on Wednesday March 6, 2019. The vote to permit this usage was unanimous in favor and will be reflected in our faculty meeting minutes.

Sincerely,

A handwritten signature in blue ink that reads "Michael W. Renfro".

Michael W. Renfro
Professor and Chair of the Mechanical Engineering Department
University of Kentucky
153 Ralph G. Anderson Building
Lexington, KY 40506

michael.renfro@uky.edu

see blue.