

## Brothers, Sheila

---

**From:** Cramer, Aaron  
**Sent:** Tuesday, March 05, 2019 6:52 PM  
**To:** Bird-Pollan, Jennifer; Brothers, Sheila  
**Cc:** Vincelli, Paul  
**Subject:** NEW MS: Science Translation and Outreach  
**Attachments:** STO curricular proposal, full submission to UK Senate, 25 Feb 2019.pdf

Proposed New MS in Science Translation and Outreach

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new MS degree: Science Translation and Outreach, in the College of Agriculture, Food and Environment.

Rationale: The Cooperative Extension Service has been engaged in science translation for more than 100 years. Extension agents work directly with local leaders and the public to address diverse public needs in different communities. Rapid scientific progress and increasing complexity have created a need for transdisciplinary education in science translation. The proposed program addresses this need through a set of required courses focusing on program development and evaluation, science literacy and translation, and research methods, elective courses allowing specialization, and a capstone course. While not exclusively targeted to such individuals, the proposal notes that nearly 100 college employees are enrolled in master's programs at other institutions. Many of these individuals are extension agents, a population for whom earning a master's degree opens up career advancement possibilities. The proposed online degree program will address the need of such extension agents. A cohort of 10 students per year is anticipated.

Aaron

Aaron M. Cramer  
Associate Professor, Electrical and Computer Engineering  
Director of Graduate Studies, Electrical Engineering  
Chair, Senate's Academic Programs Committee  
University of Kentucky  
859-257-9113  
[aaron.cramer@uky.edu](mailto:aaron.cramer@uky.edu)

**NEW MASTER'S DEGREE PROGRAM**

**Office of Strategic Planning and Institutional Effectiveness (OSPIE).** The new program approval process begins when a contact persons 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: Agriculture, Food and Environment
1b	Home Educational Unit (school, department, college <sup>1</sup> ): <i>College of Agriculture, Food and Environment</i>
1c*	Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE ( <a href="mailto:OSPIE@L.uky.edu">OSPIE@L.uky.edu</a> ) for help with questions in this section.)
	Date of Contact with OSPIE: 26 Jul 2018
	<input checked="" type="checkbox"/> Appended to the end of this form is a PDF of the reply from OSPIE.
	<input 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): 01.0801

<sup>1</sup> Only interdisciplinary graduate degrees may be homed at the college level.

**NEW MASTER'S DEGREE PROGRAM**

	Degree Type (MA, MS, etc.) <sup>2</sup> : MS		
	Is this degree designation on the CPE's list of degree designations <sup>2</sup> ? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
	If "No," please provide an explanation for OSPIE's use in external reporting purposes.		
	The proposed M.S. program is novel, to the best of our knowledge		
1d*	Major Name (Biology, Finance, etc.): <i>Science Translation and Outreach</i>		
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 <sup>3</sup> : <i>Fall 20 19</i>
1h*	Anticipated date for granting first degree(s): <i>Spring 2024</i>		
1i*	Contact person name: <i>Paul Vincelli</i>	Email: <i>pvincell@uky.edu</i>	Phone: <i>859-218-0722</i>
<b>2. Program Overview</b>			
2a*	Provide a brief description of the proposed program. (300 word limit)		
	<p><i>Most Americans respect the institution of science but are uncertain how to capitalize on scientific knowledge for the public good. Our digital world overwhelms us with information, so much so that the public is often unable to discern scientifically valid information and, most importantly, to effectively use that information to improve lives. Transdisciplinary thinking is recognized by the National Academy of Sciences as fundamental to achieving breakthroughs in food and agricultural sciences. An example of a transdisciplinary Extension program could be the development of locally relevant programming on the politically charged topic of climate change. Successful transdisciplinary programming would be grounded in multiple, relevant natural sciences, but it would also benefit by being grounded in the social sciences, in order to facilitate successful dialogue.</i></p> <p><i>We will offer a transdisciplinary Master of Science degree program that builds student capacity to:</i></p> <ol style="list-style-type: none"> <li><i>Assess public needs and interests with respect to agriculture, food and environment;</i></li> <li><i>Identify, sort and interpret credible scientific information from diverse fields relevant to public concerns; and,</i></li> <li><i>Use scientific information to create successful programs in applied research and outreach which effectively address public concerns.</i></li> </ol> <p><i>The program, described elsewhere in this document, requires 12 credits (four 3-credit courses) of core material and 18 credits of free elective courses approved by the student's advisory committee. The program will be housed in the College of Agriculture, Food and Environment. A primary audience for this program is Extension agents who are regularly expected to translate scientific knowledge directly to their stakeholders and to develop success outreach programs based on sound scientific practices.</i></p>		

<sup>2</sup> Visit <http://dataportal.cpe.ky.gov/cpedegreedesignations.aspx> for the CPE's list of approved degree designations.

<sup>3</sup> 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.

**NEW MASTER'S DEGREE PROGRAM**

2b	<p>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)</p>
	<p>Most Americans respect the institution of science but often are unsure as to how to capitalize on scientific knowledge for the good of the public. This program will:</p> <ol style="list-style-type: none"> <li>1. Address the need among Kentucky Extension agents for M.S.-level graduate education.</li> <li>2. Respond to society's need for skill in identifying credible scientific information that is relevant to important public issues relating to agriculture, food, and the environment; and,</li> <li>3. Empower graduates to build, execute, and evaluate science-based programs that address such issues.</li> </ol> <p>As of May 2018, 93 employees of the College of Agriculture, Food and Environment were enrolled in Masters programs of study at other institutions. This included 33 Extension agents and 28 Extension support staff. In order to progress above Grade Level II in the Kentucky Cooperative Extension Service, Extension agents must obtain an M.S. degree. The proposed program will help to fill that need. In addition, we expect that the program will be of interest to some Extension agents from beyond Kentucky's borders, as well as to students drawn from other populations.</p>
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>
	<ol style="list-style-type: none"> <li>1. <i>Engage with diverse audiences and explore information sources to ascertain issues of concern relating to agriculture, food and environment and their transdisciplinary relationships</i></li> <li>2. <i>Locate, identify and evaluate the credibility of relevant scientific information in agriculture, food and environment, and distinguish it from non-scientific information</i></li> <li>3. <i>Develop and assess evidence-based outreach programs that focus on issues of public concern in agriculture, food and environment</i></li> </ol>
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>The Cooperative Service has been effectively engaged in science translation since passage of the Smith-Lever Act in 1914. Extension agents throughout the country have worked directly with local leaders and the public at large to address diverse public needs. Given the increasingly complex world we live in, and the rapid rate of scientific progress, expanded and more formalized transdisciplinary education in science translation seems critical.</i></p> <p><i>Courses--and less commonly, curricula--in translational science exist elsewhere, but these often focus on human health care. To our knowledge, formal curricula on translational science do not exist among colleges of agriculture and related areas of study.</i></p> <p><i>As of May 2018, 93 employees of the College of Agriculture, Food and Environment were enrolled in Masters programs of study at other institutions. Many of these employees are Extension agents. In order to progress above Grade Level II in the Kentucky Cooperative Extension Service, Extension agents must obtain an M.S. degree. The proposed online program will help to fill that need, making graduate education more accessible for Extension agents in Kentucky as well for some Extension agents beyond Kentucky.</i></p>
2e	<p>Describe the proposed program’s uniqueness within UK. (250 word limit)</p>

**NEW MASTER'S DEGREE PROGRAM**

	<i>There is no graduate program at UK with an explicit focus on translational science in agriculture, food, environment, or related disciplines. Furthermore, the UK College of Agriculture, Food and Environment's focus on agricultural and related sciences leaves opportunities for other colleges to develop their own graduate programs in translational science without intercollegiate competition.</i>		
2f	Describe the target audience. (150 word limit)		
	<i>An important--though not exclusive--audience is expected to be Extension agents in Kentucky and throughout the region. Conservatively, we anticipate the Science Translation and Outreach (STO) program will draw at least 10 Extension professionals annually who would be new students to UK. This estimate is based on the data given in Section 2d of this form, plus a survey of Extension Directors executed by the UK CAFE Associate Dean for Extension, executed expressly to help us gauge regional interest in the STO program. We also conservatively anticipate an additional six students new to UK each year in two embedded graduate certificates currently in review; namely, Positive Youth Development (PYD) and Family and Consumer Sciences (FCS), providing Kentuckians with new opportunities for life-long learning. Some students are also expected from other populations. UK marketing efforts likely will help expand the potential pool of students.</i>		
2g*	Does the program allow for any concentrations?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," name the concentration(s). (Specific course requirements will be described in Section A, part 7.)		
	Concentration #1:		
	Concentration #2:		
	Concentration #3:		
2h	Are necessary resources available for the proposed new program? (A more detailed answer is requested in Section A, part 4.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2i	Describe how the proposed program will be administered, including admissions, student advising, retention, etc. (150 word limit)		
	<i>A Director of Graduate Studies will administer the program. Admission to the STO program requires admission to the Graduate School and approval of the STO faculty and the DGS. In addition to fulfilling requirements of the Graduate School, prospective students will submit an up-to-date curriculum vita as well as a personal statement. Students will select an advisor by the completion of six credits. Students will form a graduate advisory committee by the completion of nine credits. Composition of advisory committees will meet requirements outlined in the Graduate Bulletin. Students will have considerable latitude in selecting members of their advisory committee, providing individuals selected have some relevance to the student's professional interests and needs. Advisory committees will convene at least annually to advise the student in course selection and to assure adequate academic progress. Completion of program requirements includes passing a final oral Exit Exam administered by the student's graduate advisory committee.</i>		
2j	Are multiple units/programs collaborating to offer this program?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," please discuss the resource contribution(s) from each participating unit/program. (150 word limit) (Letters of support will be addressed in Part A, section 7.)		
	<i>This program depends on instructional units throughout the college for the development and offering of elective courses. See the document, "Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach in the College of Agriculture, Food and Environment"</i>		

**NEW MASTER'S DEGREE PROGRAM**

2k	List all UK programs <sup>4</sup> that the proposed program could be perceived as replicating. Give a rationale for why this is not duplication, or is a necessary duplication. (250 word limit)		
<i>There are no graduate programs at UK that explicitly focus on science translation and outreach in food, agriculture, and environment. This new program is a natural fit for the College of Agriculture, Food and Environment, given that "science translation" has been the central focus of our country's 104-year-old Cooperative Extension Service. Please note, appended to this proposal, communications from the UK Center for Clinical and Translational Science and from the UK Martin School of Public Policy and Administration, expressing agreement as to the absence of overlapping academic programs.</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 type="checkbox"/>	No <input checked="" 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?			
See appendix entitled, "List of Proposed Graduate Faculty in the Online M.S. Program in Science Translation and Outreach (STO) in the College of Agriculture, Food and Environment "			
2m	Will the program have an advisory board <sup>5</sup> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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:			
<b>Total Number of Advisory Board Members</b>			
<b>3. Delivery Mode</b>		<b>UK DLP and eLearning Office <sup>6</sup></b>	
3a*	Initially, will any portion of the proposed program's core courses be offered via distance learning <sup>7</sup> ?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

<sup>4</sup> 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.

<sup>5</sup> 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.

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

<sup>7</sup> 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

**NEW MASTER'S DEGREE PROGRAM**

	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"/>

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](mailto: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.			
	<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 type="checkbox"/>	Technology-enhanced instruction.			
	<input type="checkbox"/>	Evening/weekend/early morning classes.			
	<input 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	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)				
	<ul style="list-style-type: none"> <li>• Synchronous and asynchronous components.</li> <li>• Balance between traditional and non-traditional aspects.</li> <li>• Hybrid elements.</li> </ul>				

*A motivating factor for the development of this new program is to provide Extension agents in all 120 Kentucky counties the opportunity for graduate studies in content that is relevant to their occupation. As of May 2018, 93 employees of the CAFE were enrolled in Masters programs of study at other institutions. With recent legislative changes, study at other institutions is no longer covered by the UK Employee Education Program. Therefore, in order to provide opportunities for graduate study to this population, the proposed program is being developed with a priority in fully distance-learning modalities. All core courses will be entirely distance-based. With respect to electives, fully online courses will provide opportunities for students at substantial distances to complete degree requirements, although students may choose to take approved courses with an on-campus requirement, subject to approval by the DGS (and by their advisory committee, once formed). Both synchronous and asynchronous courses will be employed. Asynchronous courses offer the advantage of flexibility for busy people, but synchronous offerings may be initially more suitable for those teachers new to online learning.*

**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)

*New faculty appointments are not anticipated. The program will draw largely on the resources of existing faculty. For selected courses, part-time, Ph.D.-level instructors will be recruited and compensated for their services (overload assignments). The College of Agriculture, Food and Environment and the UK Provost have committed to providing funds for monetary incentives for development and initial delivery of the program's core courses. Funds were also provided for development and initial delivery of a set of elective courses. Once financially stable, funds from tuition return will be used to continue to incentivize college-wide development and delivery of suitable electives. Please see the document, "Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach in the College of Agriculture, Food and Environment," appended to this proposal.*

---

instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous.

**NEW MASTER'S DEGREE PROGRAM**

	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>Courses in the program will be 100% online, so that the degree program is available to Extension agents seeking appropriate professional development from anywhere in Kentucky and beyond. Courses will be taught using existing laptop/desktop computers. As needed, instructors will take advantage of AV services available at Young Library and of technical and curricular support from the Office of Distance Learning. Both of the embedded certificate programs will use start-up funds to provide overload support for course development and delivery for six instructors (three in FCS and three in PYD). Once the programs become financially self-sustaining, tuition revenue will be used to support the course offerings of several instructors.</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>Units throughout the College are expected to offer courses that can serve as electives in this program, as incentive funds--and eventually, tuition revenue--become available for course development and delivery. Please see the document, "Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach in the College of Agriculture, Food and Environment," appended to this proposal.</i>	
	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: <ul style="list-style-type: none"> <li>• Demonstration of true collaboration between multiple units<sup>8</sup>;</li> <li>• Impact on the course's use on the home educational unit; and</li> <li>• Verification that the chair/director has consent from the faculty members of the unit.</li> </ul>	

<sup>8</sup> Show evidence of detailed collaborative consultation with such units early in the process.



**NEW MASTER'S DEGREE PROGRAM**

4d	Fill out the faculty roster below for full-time and part-time faculty teaching major core courses in the proposed program.		
<b>NAME</b>	<b>COURSES TAUGHT</b>	<b>ACADEMIC DEGREES AND COURSEWORK</b>	<b>OTHER QUALIFICATIONS AND COMMENTS</b>
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.
Paul Vincelli, F	Spring, STO 650, 3 cr, G	PPA 620, UK, Plant Pathology	Thirty years of experience in academic instruction at the university level
Kenneth Jones, F	Summer, STO 601, 3 c, G		Offers graduate courses at UK, including a course in program development and evaluation; serves as Director of the CAFÉ Office of Extension Program and Staff Development
Rick Bennett, F	Spring, STO 602, 3 cr, G		Several decades of professorial experience and scientific leadership at universities, the American Phytopathological Society, and the federal government
David Weisenhorn, non-faculty, F	Fall, STO 603, 3 cr, G		Senior Extension Specialist for Parenting and Child Adolescence Education, Ph.D. in Family Sciences. Research interests focus on the family process, family protective factors, parenting, and healthy communication.

**NEW MASTER'S DEGREE PROGRAM**

FT = full time PT= part time	D = developmental UN = undergraduate nontransferable UT = undergraduate transferable G = graduate		

**NEW MASTER'S DEGREE PROGRAM**

**5. Assessment – Program Assessment and Student Learning Outcomes (SLOs)**

5a	<p>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. (250 word limit)</p>
	<p><i>This program will:</i></p> <ol style="list-style-type: none"> <li>1. Address the need among Kentucky Extension agents for M.S.-level graduate education;</li> <li>2. Respond to society's need for skill in identifying credible scientific information that is relevant to important public issues relating to agriculture, food, and the environment; and,</li> <li>3. Empower graduates to build, execute, and evaluate science-based programs that address such issues.</li> </ol> <p><i>The STO DGS, academic staff, and STO Graduate Faculty will monitor student inquiries, applications and acceptances in order to assess whether suitably qualified students from Kentucky and beyond are being recruited to the program.</i></p> <p><i>For Program Objectives listed in section 2b:</i></p> <p><i>Program Objective #1 will be monitored through admissions of Extension agents and other qualified students; degrees awarded; time to degree completion; student grades, and through direct communications with Extension agents, Extension administrators, and students.</i></p> <p><i>Program Objective #2 will be evaluated through survey responses from program graduates one year post-graduation. Questions will help to identify strengths, limitations, and opportunities for improvement. Additional assessment data will include retention rates and overall financial sustainability of the program.</i></p> <p><i>Program Objective #3 will be evaluated through survey responses as mentioned for Program Objective #2, and through direct communications with Extension agents, Extension administrators, and students.</i></p>
5b	<p>(related to section 15) Append an assessment plan<sup>9</sup> for the SLOs to the end of this form. (Click <a href="#">HERE</a> for a sample assessment plan.)</p>
5c	<p>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. (300 word limit)</p>
	<p>Three core courses (STO 601, STO 602, and STO 603) directly provide the conceptual learning undergirding the student learning outcomes (SLOs) in this program. The capstone course (STO 650) provides the opportunity to reinforce and emphasize these concepts by putting them into practice. The curriculum map (provided in the document named "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES" and appended to this proposal) visually illustrates the correspondence of the four core courses with the program's SLOs.</p> <p>The electives are comprised of a minimum of 18 credits. Electives will serve multiple purposes: (1) to reinforce core concepts of science literacy and scientific practice within the context of students' disciplinary interests; (2) to expand students' scientific and disciplinary literacy through exposure to diverse disciplines; and (3) to expand their capacity to analyze and communicate diverse scientific content to lay audiences. Advisory committees will have the responsibility to ensure that students enroll in electives representing disciplinary interests as well as electives outside of the student's principle disciplinary education/experiences. Such flexibility reflects the great</p>

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

**NEW MASTER'S DEGREE PROGRAM**

	diversity of programmatic challenges our students will encounter over their careers, particularly Extension agents.
5d	Append a PDF of the program's course map <sup>10</sup> to the end of this form. (Click <a href="#">HERE</a> 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. (300 word limit).
	<i>For details of the assessment plan, see "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES," appended to this proposal.</i> <ul style="list-style-type: none"> <li>• <i>SLO #1: Representative student learning will be evaluated in STO 601 (rubric included in ASSESSMENT PLAN). Representative student learning will be evaluated in elective courses using an assessment rubric common across elective courses. The written report in STO 650 and the oral exit exam will also provide opportunities for evaluation of student learning. For assessing learning in the oral exam at the conclusion of the program, see the rubric entitled, "Scoring Rubric for Overall Performance" in the ASSESSMENT PLAN.</i></li> <li>• <i>SLO #2: Representative student learning will be evaluated in STO 602 (see ASSESSMENT PLAN). Representative student learning in elective courses, and elements of STO 650, will be assessed as described above.</i></li> <li>• <i>SLO #3: Representative student learning will be evaluated in STO 603 (see ASSESSMENT PLAN). Representative student learning in elective courses, and elements of STO 650, will be assessed as described above.</i></li> </ul>
5f	When will components be evaluated? Identify the review cycle for each student learning outcome. (e.g, every semester or each year) (150 word limit)
	<i>Program SLOs will be assessed every three years, one per year, in order. See "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES," appended to this proposal.</i>
5g	When will the data be collected? (This may or may not be different from when the assessment is conducted.) (150 word limit)
	<i>At least annually.</i>
5h	How will the data be collected? (150 word limit)
	See "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES," appended to this form.
5i	What will be the benchmarks and/or targets to be achieved? (150 word limit)
	<i>90% of students achieve a level of "Accomplished" for each performance criterion assessed in rubric (see "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES," appended to this proposal). 90% of students achieve an "Accomplished" rating for each SLO scored at the conclusion of the student's program of study (see ASSESSMENT PLAN).</i>
5j	What individuals or groups will be responsible for data collection? (150 word limit)
	<i>The program DGS will be responsible for data collection but will have the assistance of course instructors and the data analyst for the CAFE Center for Student Success.</i>
5k	How will the data and findings be shared with faculty? (150 word limit)

<sup>10</sup> 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.

**NEW MASTER'S DEGREE PROGRAM**

	<i>Data and findings will be shared in an annual report via email with the administration of the College, with the Graduate Faculty of the program, and with other interested and appropriate individuals.</i>		
5l	How will the data be used for making programmatic improvements? (150 word limit)		
	<i>The STO Graduate Faculty will meet at least annually to consider assessment results and to make changes to the program, as appropriate. Courses are commonly revised for a variety of reasons in order to improve instructional outcomes, especially when first offered. Instructors of individual courses will be supported and encouraged to consult with the STO Graduate Faculty and others with respect to how to continually improve their courses. Instructors will remain abreast of opportunities for professional development and consultation through the Office of Distance Learning. Significant changes to the curriculum will be subject to majority approval by the STO Graduate Faculty and then subject to processes as indicated by UK academic policies.</i>		
5m	What are the measures of teaching effectiveness? (150 word limit)		
	<i>Those obtained through standard UK course evaluations. As the program matures, the STO Graduate Faculty will consider how to assess program impact through surveys of stakeholder leaders.</i>		
5n	What efforts to improve teaching effectiveness will be pursued based on these measures? (150 word limit)		
	<i>Regular personal communications between the DGS and other instructors will undergird efforts to improve teaching effectiveness. Instructors will continually be encouraged to avail ourselves of training opportunities available through the Distance Learning program of the Office of Academic Technologies &amp; Faculty Engagement, and through the Center for the Enhancement of Learning and Teaching (CELT).</i>		
5o	What are the plans to evaluate students' post-graduate success? (150 word limit)		
	<p><i>A post-graduation survey was mentioned above. Since Extension agents are UK employees, it should be relatively easy to communicate with those remaining at UK. Even those that have accepted new employment will often be accessible through their former employer. Post-graduation surveys will be conducted with the help of staff in the Office of the Associate Dean for Instruction, with results disseminated by the DGS and the Associate Dean for Instruction. The survey will include questions such as:</i></p> <ul style="list-style-type: none"> <li><i>• I am satisfied with ___ (course availability, instructional quality, etc.). (1-5 Likert scale)</i></li> <li><i>• I am satisfied with the overall learning I received. (1-5 Likert scale)</i></li> <li><i>• I am better-able to make sense of scientific information. (1-5 Likert scale)</i></li> <li><i>• The learning I received has been useful in doing my job. (1-5 Likert scale)</i></li> </ul>		
<b>6. Miscellaneous</b>			
6a	Is there anything else about the proposed program that should be mentioned? (150 word limit)		
	Given the expectation that Kentucky Extension agents who are hired without a Masters degree must receive that degree in order to progress in their "career ladder," we anticipate an annual pool of qualified applicants for the foreseeable future. The proposed program is important in order to make graduate education available to our Extension agents throughout the state.		
<b>7. Non-Course Requirements</b>			
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"/>

**NEW MASTER'S DEGREE PROGRAM**

	If "Yes," describe below. (150 word limit)		
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)		
	<i>The GRE exam will be required of applicants.</i>		
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)		
	Transfer credits will be permitted within the limits established by the Graduate School and will be evaluated by a committee of the STO Graduate Faculty on a case-by-case basis.		
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.		
	Students must complete a capstone project for successful completion of the capstone course, Capstone in Science Translation and Outreach (STO 650). In addition, students must pass an oral exit exam covering program content and their capstone course project.		
7h	Provide the final examination criteria.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Students must provide a satisfactory performance in an oral exam with their Graduate Advisory Committee. Content of the exam may cover the required capstone project as well as general content from the student's coursework.		
7i	Describe termination criteria.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	As per described in the Graduate School Bulletin.		
<b>8. Course Requirements.</b>			
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: 15	600-level: 15
			700-level:
8b*	What is the total number of credit hours required for the degree? <sup>11</sup> (e.g. 24, 32)		30

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

**NEW MASTER'S DEGREE PROGRAM**

If an explanation about the total credit hours is necessary, use the space below. (150 word limit)

*Use the grids below to list core courses, electives, courses for a concentration, etc.  
Use the course title from the Bulletin or from the most recent new/change course form.*

**8c\*** **Program Major Core Courses.** These courses are required for all students in the program and include prerequisite courses. Check the appropriate box to describe the course as either “program core” or “prerequisite.”

Prefix & Number	Course Title	Type of Course	Credit Hrs	Course Status <sup>12</sup>
<i>STO 601</i>	<i>Program Development and Evaluation, cross-listed with CLD/SOC 665</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite	3	Change
<i>STO 602</i>	<i>Science Literacy and Translation</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite	3	New
<i>STO 603</i>	<i>Research Methods</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite	3	New
<i>STO 650</i>	<i>Capstone in Science Translation and Outreach</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite	3	New
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Prerequisite		Select one....
<b>Total Core Courses Credit Hours:</b>				

<sup>12</sup> Use the drop-down list to indicate if the course is a new course (“new”), an existing course that will change (“change”), or if the course is an existing course that will not change (“no change”).

**NEW MASTER'S DEGREE PROGRAM**

8d	Is there any narrative about prerequisite courses for the program that should be included in the Bulletin? If "Yes," note below. (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Admission requires a baccalaureate degree in a field related to the social and/or natural sciences relevant to agriculture, food and environment, approval of a committee of the STO Graduate Faculty and the DGS, and admission to the UK Graduate School. Program admission does not require specific course prerequisites.</i>			
8e	Is there any narrative about core courses for the program that should be included in the Bulletin? If "Yes," note below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Although STO 650 (Capstone in Science Translation) is taught during a given semester, students executing successful capstone projects will commonly begin considering suitable topics several semesters before official enrollment in STO 650.</i>			
<b>Program Guided Electives<sup>13</sup></b> (Guided electives for <u>all</u> students in the program.)			
8f*	Does the program include any guided electives? (If "Yes," indicate and note the specific courses in the grid below. If "No," indicate and proceed to question 7i.)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
8g*	Using the grid provided, list the guided electives below.		
Prefix & Number	Course Title	Credit Hrs	Course Status <sup>14</sup>
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
<i>Total Credit Hours as Guided Electives:</i>			
8h	Is there any narrative about guided electives courses that should be included in the Bulletin? If "Yes," note below. (150 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>Program Free Electives<sup>15</sup></b> . (Free electives for <u>all</u> students in the program.)			

<sup>13</sup> Guided electives are available to all students in the program and are organized as groups of elective courses, from which a student chooses one (or two, or three, etc.).

<sup>14</sup> 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").

<sup>15</sup> Program free electives are available to all students in the program (regardless of any concentration(s)) and the choice of which course(s) to take is up to the student. Courses are not grouped but can be described as "student must take three courses at the 600-level or above."



**NEW MASTER'S DEGREE PROGRAM**

8i*	Does the program include any free electives? (If "Yes," indicate and proceed to question 7j. If "No," indicate and proceed to 7l.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
-----	--	---	-----------------------------

8j*	What is the total number of credit hours in free electives?	18
-----	---	----

8k	Provide the free electives courses language that will be included in the Graduate School Bulletin. (150 word limit)
----	---

*In consultation with their Advisory Committee and subject to DGS approval, students will develop individualized programs of study totaling at least 18 credit hours of elective courses. While the core curriculum provides learning appropriate to the practice of science translation and outreach, elective courses allow students to: (1) Develop deeper knowledge in disciplinary areas of their undergraduate degree and/or professional experience; and (2) Gain broader, transdisciplinary exposure to less familiar subject-matter content, expanding their capacity to translate science content to lay audiences. It is the responsibility of the Advisory Committee to ensure that students enroll in electives of both types. Such flexibility reflects the great diversity of programmatic challenges our students will encounter over their careers, particularly as Extension agents. Elective courses commonly will be selected from offerings of the College of Agriculture, Food and Environment; however, courses in other UK colleges may be considered.*

**Courses for a program's concentration(s).**

Click [HERE](#) for a template for additional concentrations<sup>16</sup>.

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 <sup>17</sup>
	<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		Select one....

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

<sup>17</sup> 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").

**NEW MASTER'S DEGREE PROGRAM**

		<input type="checkbox"/> Elective			
		<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 checked="" type="checkbox"/>
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 <sup>18</sup>		
		<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....	
			<i>Total Credit Hours, Concentration #2:</i> _____		
8q	Provide concentration-related language that should be included in the Graduate School Bulletin for the second concentration. (150 word limit)				

<sup>18</sup> 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").

**NEW MASTER'S DEGREE PROGRAM**

8r	Is there anything else about the proposed program that should be mentioned? (150 word limit)
	<i>At least initially, the program will be offered with part-time students in mind, since our expected principal source of students will be Extension agents with full-time employment.</i>

**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 <a href="#">HERE</a> 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.		
	<b>YEAR 1 - FALL:</b>	<i>See attached Degree Plan</i>	<b>YEAR 1 - SPRING:</b>
	<b>YEAR 2 - FALL :</b>		<b>YEAR 2 - SPRING:</b>
	<b>YEAR 3 - FALL:</b>		<b>YEAR 3 - SPRING:</b>

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>All four core courses will be taught at the 600 level. The first three (STO 601, STO 602 and STO 603) do not represent a hierarchy but, rather, they offer complementary content to fill out students' core content. The capstone (STO 650) represents an increase in complexity and rigor, as students will largely practice cognitive skills of analysis, synthesis, and evaluation. Electives will also help students prepare for the capstone experience by challenging students with content in multiple and diverse academic disciplines.</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).

	<b>Reviewing Group Name</b>	<b>Date Approved</b>	<b>Contact Person Name/Phone/Email</b>
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>		
	<i>STO Graduate Faculty</i>		<i>Paul Vincelli / 859-218-0722 / pvincell@uky.edu</i>
	<i>CAFÉ Graduate Curriculum Committee</i>		<i>Larry Grabau / 859-257-3468 / lgrabau@uky.edu</i>
			<i>/ /</i>
			<i>/ /</i>

10b	<i>(Collaborating and/or Affected Units)</i>		
	<i>See appended file, List of Collaborating or Affected Units</i>		<i>/ /</i>
	<i>Martin School of Public Policy and Administration</i>	<i>16 Oct 2018</i>	<i>Ron Zimmer / 859-323-5413 / ron.zimmer@uky.edu</i>

**NEW MASTER'S DEGREE PROGRAM**

	<i>Center for Clinical and Translational Science</i>	<i>25 Oct 2018</i>	<i>Tom Kelly / (859) 323-5206 / thkelly@uky.edu</i>
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /

10c	(Senate Academic Council)	Date Approved	Contact Person Name
	Health Care Colleges Council (if applicable)		
	Graduate Council		

**NEW MASTER'S DEGREE PROGRAM**

<b>INFORMATION REQUIRED BY CPE AND SACS</b>	
<b>11. Program Overview – Program Quality and Student Success</b>	
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>To our knowledge, there is no equivalent graduate program at other colleges of agriculture. This program builds upon the excellence of Kentucky's Cooperative Extension Service (CES) which, with over nine million direct contacts in fiscal year 2018, is valued at local levels throughout the Commonwealth and respected nationally.</i></p>
11b	<p>Clearly state the student admission, retention, and completion standards designed to encourage high quality. (300 words)</p> <p><i>Students are required to hold a baccalaureate degree from a fully accredited institution of higher education. Students must be admitted to the Graduate School and approved by the STO Graduate Faculty and the STO Director of Graduate Studies.</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>There is no equivalent graduate program relating to science translation and outreach in subjects dealing with agriculture, food and environment.</i></p>
11d	<p>Identify the applicant pool and how applicants will be reached. (300 word limit)</p> <p><i>The principal applicant pool will be Extension agents in Kentucky and, to a lesser extent, those in other states. Kentucky Extension agents are required to hold a Masters degree to progress in their "career ladder." While some are hired already holding a Masters degree, others study for their degree on a part-time basis while employed as Extension agents. Based on a recent survey by the College of Agriculture, Food and Environment, the STO Graduate Faculty conservatively expects that the program will admit at least ten students per year. Assuming a five-year period for degree completion, we anticipate a program that can service ten new students per year. Assuming a five-year time frame for degree completion as part-time students, we anticipate a steady-state population of at least 50 Extension agents pursuing M.S. degrees.</i></p> <p><i>Extension agents in Kentucky can be easily reached through the Cooperative Extension Service administration. Other populations will be reached with the help of UK marketing efforts.</i></p>
<b>12. Mission: Centrality to the Institution's Mission and Consistency with State's Goals</b>	
12a*	<p>(related to 2b) Explain how the program objectives support at least two aspects of <a href="#">UK's institutional mission and academic strategic plan</a>? (150 word limit)</p> <p><i>The proposed program will provide high-quality, career-relevant graduate education accessible via distance learning to Extension agents and other populations. The program will contribute to the following UK strategic objectives:</i></p> <ul style="list-style-type: none"> <li>• <i>Graduate Education – producing graduates “who contribute to the Commonwealth, the nation, and the world through their research and discovery, creative endeavors, teaching, and service.”</i></li> <li>• <i>Diversity and Inclusivity – The Kentucky Extension Service is committed to continually strengthening the diversity of our workforce and our clientele populations. Enhancing the scholastic excellence of the diverse members of the Kentucky Extension Service will help them strengthen their capabilities to address the needs of diverse audiences, from a basis of respect and appreciation for our shared humanity</i></li> <li>• <i>Community Engagement – Extension agents and other students will have expanded capacities to improve the lives of citizens in our Commonwealth and beyond through science-based programming.</i></li> </ul>
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>By providing online access to graduate education statewide to Extension agents and others, this program will help to raise the percentage of Kentuckians with high-quality postsecondary degrees. Because Extension agents</i></p>

## NEW MASTER'S DEGREE PROGRAM

	<i>make significant contributions to the economic vitality of Kentucky communities, this program will help to foster economic growth and development.</i>
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.)
<b>13. Resources</b>	
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>We anticipate that some faculty members and instructors from throughout the College of Agriculture, Food and Environment will have an interest in serving on Student Advisory Committees. As described in the attached document, "Plan for Development of Electives for the Online M.S. Curriculum," we are confident that numerous faculty members from various units in the College will develop--or are already developing--a significant and growing pool of courses that the STO program can use as electives.</i>
13b	What will be the projected "faculty-to-student in major" ratio? (150 word limit) <i>We conservatively anticipate a steady-state population of new students at least ten per year. Each of the four core courses is taught by one professor, so we anticipate a faculty-to-student ratio of approx. one to ten in the core courses. Faculty-to-student ratios in electives are unknown but are expected to vary.</i>
13c	Describe the library resources available <sup>19</sup> 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 services available through the W. T. Young Library (including Interlibrary Loan) are expected to meet the scientific needs of our students. Diverse sources of other information may be relevant to student capstone experiences, but students will be expected to appropriately evaluate such sources for relevance and credibility. Distance Learning Library Services, available through the UK library system, will be employed to facilitate information access by off-campus students.</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>None needed, beyond the facilities and services already provided at UK in support of distance learning.</i>
<b>14. Demand and Unnecessary Duplication</b>	
14a*	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) <ul style="list-style-type: none"> <li>This evidence is typically in the form of surveys of potential students and enrollments in related programs at the institution.</li> <li>Anecdotal evidence is insufficient. Demonstrate a systematic collection of data, thorough study of the data, and a reasonably estimated student demand for the program.</li> </ul> Provide evidence of student demand at state and national levels. <i>In order to progress above Grade Level II in the Kentucky Cooperative Extension Service, Extension agents must obtain a Masters degree. A survey conducted in May, 2018 indicated that 33 Extension agents and 28 Extension support staff were enrolled in Masters programs at Kentucky post-secondary institutions other than UK. With the 2018 changes in the UK Employee Education Program, these full-time employees lost the support of the</i>

<sup>19</sup> Please contact Institutional Effectiveness ([institutionaleffectiveness@uky.edu](mailto:institutionaleffectiveness@uky.edu)) for more information.

**NEW MASTER'S DEGREE PROGRAM**

	<i>Employee Education Program (EEP) towards completing their degree programs. Our college wishes to support the graduate education of these valued employees--and that of other students--by providing an online M.S. program that will meet their educational needs. Based on these figures, we expect a steady-state enrollment in the program of approximately 50 part-time students at any given time, students which had been previously unable to attend UK for graduate studies. This figure does not include possible enrollees from other institutions, which could add 1-5 students per year, based on our Aug 2018 survey.</i>		
14b	Clearly state the degree completion requirements for the proposed program. (150 word limit)		
	Satisfactory completion of all four core courses; at least 18 credits of approved elective courses; and satisfactory completion of a final oral examination conducted by the student's Graduate Advisory Committee.		
14c*	Will this program replace or enhance any existing program(s) or tracks (or concentrations or specializations) within an existing program? (300 word limit)		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If "Yes," explain:		
14d	Identify the primary feeders for the program. (150 word limit)		
	<i>The Kentucky Cooperative Extension system, as described in 14a, above, is expected to be the primary feeder. Occasional students are also expected from Extension services in neighboring states, as well as from nonformal adult education contexts.</i>		
14e	Describe the student recruitment and selection process. (300 word limit)		
	<i>There are no existing programs in Science Translation and Outreach. Communications about this program and its educational opportunities will occur via the CAFÉ administration and the Program DGS, who will communicate directly with Kentucky Extension agents and staff. Extension administrators in other states will be notified of the program through UK's Extension administration. A committee of STO faculty will be responsible for student selection.</i>		
14f*	Specify any distinctive qualities of the proposed program. (300 word limit)		
	<i>As far as the committee that conceived and developed this curriculum is aware, we consider it to be unique in the USA, particularly in blending of explicit education in science translation and outreach with freely chosen electives pertinent to the student's future career plans in agriculture, food and environment. In addition, we highlight the program's unique use of electives in support of student learning outcomes. Electives will provide disciplinary knowledge relevant to the student's future career, but they will also provide opportunities for transdisciplinary thinking by exposing them to substantial content outside their disciplinary knowledge.</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>As explained in 14a, we conservatively expect a steady-state enrollment of 50 part-time students. These would all be new students to UK, since previously, such students would have been enrolled in postsecondary institutions other than UK and supported through UK's Employee Education Program.</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
	2020 - 2021	0	20
	2021 - 2022	0	30
	2022 - 2023	0	40
	2023 - 2024	10	50

**NEW MASTER'S DEGREE PROGRAM**

14i	Clearly describe all evidence justifying a new program based on changes in the academic discipline or other academic reasons. (300 word limit)		
	<i>In Spring, 2018, the Kentucky General Assembly ended the program allowing UK employees to attend other Kentucky institutions of higher education without paying the cost of tuition. Since Kentucky Extension agents are often hired with the understanding that they will obtain an M.S. degree within five years, the UK College of Agriculture, Food and Environment developed this online program to meet this need. With respect to the academic focus on science translation and outreach in agriculture, food and environment, this new online M.S. program is unique in the region, if not the nation. Furthermore, it will help meet the professional needs of Kentucky Extension agents to expand their capacity to meet local needs with science-based programming, all through online modalities which allow them to participate in the program regardless of distance.</i>		
14j	Has the Council on Postsecondary Education identified similar programs? <sup>20</sup>	Yes <input type="checkbox"/>	No <input checked="" 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"/>
	If "Yes," explain: <i>The committee is unaware of any other graduate program in science translation and outreach in agriculture, food and environment.</i>		
(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"/>
	If "Yes," explain: <i>It serves the needs of Kentucky Extension agents located throughout the Commonwealth, who are UK employees, for Masters-level education, but who would otherwise be unable to participate because of distance. The proposed program fits the needs of Extension agents out-of-state, as well, as there is no existing online Masters program that would provide the equivalent content, training, or accessibility.</i>		
(3)	Is access to existing programs limited? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain: <i>Access of many Extension agents to graduate education is limited by distance. They are full-time employees of UK, often with families, and are unable to relocate to campus for the academic year. This program will permit Extension agents in distant counties to obtain career-relevant graduate education..</i>		
(4)	Is there excess demand for existing programs? (150 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," explain:		
(5)	Will there be collaboration between the proposed program and existing programs? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "yes," explain the collaborative arrangements with existing programs. If "no," explain why there is no collaboration with existing programs.		
	<i>While there is no equivalent program with which collaboration would be possible, funds are available from the College of Agriculture, Food and Environment and the UK Provost to incentivize departments from across the College to develop diverse electives suitable for the needs of both this program and those of the originating department. Once the program is successfully underway and attracting students, we anticipate using tuition income to the program for continued incentivization of online course development and delivery. See the document, "Plan for Development of Electives for the Online M.S. Curriculum," appended to this proposal.</i>		
14k*	Are there similar programs in other <a href="#">Southern Regional Education Board (SREB)</a> states in the nation?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," please answer the questions below to demonstrate why this proposed program is needed in addition to the one(s) currently in existence.		
14k. i*	Identify similar programs in other SREB states and in the nation.		

<sup>20</sup> Please contact OSPIE ([OSPIE@L.uky.edu](mailto:OSPIE@L.uky.edu)) for help with this question.



**NEW MASTER'S DEGREE PROGRAM**

14k.ii*	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.? If "Yes," explain. (300 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	The overall focus of this program is on combining a core of required courses that focus on science translation and outreach with free electives that provide disciplinary knowledge that will allow the application of the core curriculum to address public needs. This overall approach appears to be unique with respect to agriculture, food and environment.		
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? If "Yes," explain. (300 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	It serves the needs of Kentucky Extension agents located throughout the Commonwealth, who are UK employees, for M.S.-level education, but who would otherwise be unable to participate graduate studies at UK because of distance.		
14k.iv*	Is access to existing programs limited? If "Yes," explain. (300 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Although the College of Agriculture, Food and Environment offers many opportunities for graduate students, there are very few fully online graduate programs. Extension agents and other students who live--and are employed full-time--outside of Fayette County have substantial limitations to participating in UK graduate programs, which are currently heavily based on in-class course offerings.		
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 checked="" type="checkbox"/>	No <input type="checkbox"/>
	While there is no equivalent program with which collaboration would be possible, the proposed program is transdisciplinary and, consequently, it depends on the collaboration of other programs in the College, both in providing elective courses and in serving on student's advisory committees. The College has allocated \$180,000 largely to incentivize the development of diverse electives suitable for the needs of both this program and those of the originating department. Once the program is successfully underway and attracting students, we anticipate using tuition income to the program for continued incentivization of online course development and delivery.		
14l	Would your institution like to make this program available through the <a href="#">Academic Common Market</a> <sup>21</sup> ?	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>In order to progress above Grade Level II in the Kentucky Cooperative Extension Service, Extension agents must obtain a Masters degree, as described in the document, Agent Professional Promotion System Criteria and</i>		

<sup>21</sup> Please contact OSPIE ([OSPIE@L.uky.edu](mailto:OSPIE@L.uky.edu)) for more information.

**NEW MASTER'S DEGREE PROGRAM**

	<p><i>Standards, <a href="http://ces-manuals.ca.uky.edu/files/professional_promotion_procedures_and_career_ladder_guidelines_-_may_2018.pdf">http://ces-manuals.ca.uky.edu/files/professional_promotion_procedures_and_career_ladder_guidelines_-_may_2018.pdf</a>. Since Extension agents are often hired with the understanding that they will pursue their M.S. during employment, offering an online option that is broad enough to meet the diverse needs of Extension agents in Kentucky and beyond is expected to provide an appealing option to this population of potential students.</i></p>
14n*	<p>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.</p> <p><i>Since Extension agents are already full-time employees, students in the program are expected to continue with that employer or seek other professional employment related to their expertise and credentials, including positions in the private sector in agriculture, food and environment. Students interested in obtaining employment as an Extension agent would also be expected to value the training this program provides. Our recent survey of Extension programs in the region indicates that, conservatively, each state within the region commonly hires, on average, 10-15 new Extension agents annually. Many of these would likely have some interest in the STO program. However, employees in Extension in other states may only receive tuition incentives for attending their state's own land-grant university. Thus, it is difficult to estimate the number of likely enrollees from other states. Average salaries of STO degree recipients would be expected to be at least \$40,000 annually.</i></p>
<b>15. Assessment and Oversight</b>	
15a*	<p>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)</p> <ul style="list-style-type: none"> <li>• The program DGS, academic staff and Graduate Faculty will monitor student inquiries, applications and acceptances in order to assess whether suitably qualified students from Kentucky and beyond are being recruited to the program. Data on student admissions etc. will be monitored through the Office of the Associate Dean for Instruction. Communications with Extension field staff and with Extension administration will be conducted by the Program DGS and other members of the program's Graduate Faculty.</li> <li>• Program Objective #1 will be monitored through admissions of Extension agents and other qualified students; degrees awarded; time to degree completion; student grades, and through direct communications with Extension agents, Extension administrators, and students. Benchmarks will include:             <ul style="list-style-type: none"> <li>o Accommodation of all qualified Kentucky Extension agents wishing to enroll within three years of program initiation.</li> <li>o Retention rates above 85%</li> <li>o Graduation of 80% of enrolled part-time students within six years.</li> </ul> </li> <li>• Program Objective #2 (above) will be evaluated through survey responses from program graduates one year post-graduation. Questions will help to identify strengths, limitations, and opportunities for improvement. A written "Program Assessment Plan" is available upon request of the DGS (Paul Vincelli, <a href="mailto:pvincell@uky.edu">pvincell@uky.edu</a>).</li> <li>• Program Objective #3 will be evaluated through survey responses as mentioned for Program Objective #2, as well as through direct communications with Extension agents, Extension administrators, and students.</li> </ul>
15b*	<p>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)</p> <p><i>For details of the assessment plan, see "ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES," appended to this proposal.</i></p> <ul style="list-style-type: none"> <li>• <i>SLO #1: Representative student learning will be evaluated in STO 601 (rubric included in ASSESSMENT PLAN). Representative student learning will be evaluated in elective courses using an assessment rubric common across elective courses. The written report in STO 650 and the oral exit exam will also provide opportunities for evaluation of student learning. For assessing learning in the oral exam at the</i></li> </ul>

**NEW MASTER'S DEGREE PROGRAM**

*conclusion of the program, see the rubric entitled, "Scoring Rubric for Overall Performance" in the ASSESSMENT PLAN.*

- SLO #2: Representative student learning will be evaluated in STO 602 (see ASSESSMENT PLAN). Representative student learning in elective courses, and elements of STO 650, will be assessed as described above.*
- SLO #3: Representative student learning will be evaluated in STO 603 (see ASSESSMENT PLAN). Representative student learning in elective courses, and elements of STO 650, will be assessed as described above.*

*Program SLOs will be assessed every three years, one per year, in sequence (see ASSESSMENT PLAN). Annually, STO faculty will meet to discuss assessment results and identify opportunities for program improvement.*

**16. Cost and Funding of the Proposed Program<sup>22</sup>**

16a	Will this program require additional resources?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	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)		
	<i>Funding has been secured from the Dean of the College of Agriculture, Food and Environment, and from the UK Provost, to develop both core courses and elective courses. Start up resources have been secured to compensate departments who teach students from this program in their own graduate courses. Once these start-up funds are exhausted, our budget plan indicates that the program will be financially sustainable using tuition sharing even making conservative assumptions about student enrollment.</i>		
16b	Will this program impact existing programs and/or organizational units within your institution? (300 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes, briefly describe.		
	<i>The STO program will direct students from this program into online classes from departments throughout the college. These courses will serve as electives for the STO program. Some department chairs initially expressed concern about their teaching resources being used to support a multidisciplinary program without receiving additional funds for teaching. A summary of the revised spreadsheet/business plan (appended to this proposal) provides funding to departments to address such concerns.</i>		
	<i>One of the exciting aspects of the proposed program is how academic units throughout the College will directly and synergistically benefit from the ongoing STO incentive program for development of electives. Our initial funding will allow the STO program to incentivize and support the development of, not only the four core courses, but an additional 21 new online elective courses across numerous CAFE units. Furthermore, our business plan shows that, even under conservative enrollment assumptions, our program will be financially sustainable and able to continue incentivizing development and delivery of new elective courses from diverse departments into the foreseeable future. Thus, our proposed program will support the development of online courses appropriate to many graduate programs in the College, for years to come. For more information, please see the appended document, "Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach."</i>		
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)		
	<i>Economists on the STO Planning Committee created a comprehensive spreadsheet that provides a basis for business planning. Our analysis demonstrates that the STO program will be financially sustainable from its onset, even when based on conservative assumptions for both student enrollment and credits taken per semester by part-time students, who are expected to be the program's principal population of students. Please see the</i>		

<sup>22</sup> 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**

*appended file, Spreadsheet Undergirding the STO Business Plan. The live spreadsheet is available upon request from Paul Vincelli, pvincell@uky.edu.*

*Students attracted to the program will largely be students new to UK, because distance from their place of employment and/or residence currently limits their participation in UK graduate education and in UK-delivered opportunities for lifelong learning. This fully online program will overcome such barriers.*

*Extension agents in Kentucky's Cooperative Extension Service are expected to comprise the program's principal student pool, at least initially. With over nine million direct contacts in fiscal year 2018, the impact of Extension agents on economics and community development are substantial and well-documented. (See, for example: <https://extension.ca.uky.edu/ekcl-groups> and <https://kers.ca.uky.edu/CES/rpt/CESreports.aspx>).*

**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.

<b>Total Resources Available from Federal Sources (Federal sources include grants, earmarks, etc.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					

<b>Total Resources Available from Other Non-State Sources (Non-state sources include philanthropies, foundations, individual donors, etc.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					

<b>State Resources (State sources include general fund revenue, grants, pass-thru funds, etc.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					

<b>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.)<sup>23</sup>:</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>

<sup>23</sup> 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**

(New) Allocated Resources	100,000	0	0	0	0
(Existing) Reallocated Resources	100,000	80,000	0	0	0
Narrative/Explanation:	<i>New Allocated Resources depicts receipt of Provost awards for the new on-line MS degree (\$100,000). Existing resources reflect matching supporting from the Dean of CAFE totaling \$180,000, well in excess of the minimum \$50,000 required. Note that the 1<sup>st</sup> Year also includes a development of courses in the current year (year zero) with revenues and expenses reflected throughout this budget.</i>				
<b>Student Tuition (Describe the impact of this program on enrollment, tuition, and fees.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	42827	88,224	136,307	187195	241013
Existing	0	0	0	0	0
Narrative/Explanation:	<i>Note that this includes all new tuition estimated to be generated by the program with recognition of shares for UK, CAFE and the program of 40%, 20% and 40% respectively. Assumes part-time in-state graduate student tuition as an online program. A 3% increase in tuition annually is presumed. An assumed 10 new students enter the program annually leading to an average of 50 students total (expecting a 5 year average program length for these part-time students) upon program maturation at the end of 5 years.</i>				
<b><u>Total Funding Sources</u></b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<u>Total New</u>	142827	88224	136307	187195	241013
<u>Total Existing</u>	100000	80000	0	0	0
<b><u>TOTAL FUNDING SOURCES</u></b>	<b>242827</b>	<b>168224</b>	<b>136307</b>	<b>187195</b>	<b>241013</b>
<b>18. Breakdown of Program Expenses/Requirements<sup>4</sup></b>					
<b>(Please note – all the fields in number 17 are required for the CPE's pre-proposal form.)</b>					
<b>Staff: Executive, Administrative &amp; Managerial (Include salaries and whether new hires will be part time or full time.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	20,300	10,609	10,927	11,255	11,593
Existing	0	0	0	0	0
Narrative/Explanation <sup>24</sup> :	<i>A modest increase in salary for a part-time Director of Graduate Students is included herein, with the 1<sup>st</sup> Year also including a developmental prior year in the amount shown. The amounts are increased by 3% per year.</i>				
<b>Other Professional (Include salaries.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative/Explanation:					

<sup>24</sup> Discuss whether new hires will be full-time or part-time.

**NEW MASTER'S DEGREE PROGRAM**

<b>Faculty (Include salaries and whether new hires will be part time or full time.)</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	140,000	108,815	81,166	62,353	65,151
Existing	0	0	0	0	0
Narrative/Explanation <sup>25</sup> :	<i>Included herein are incentive funding for the development and initial offerings of courses for the program by existing faculty devoting part-time effort to the program. Likewise, these amounts reflect payments for subsequent course offerings with 3% increases as warranted.</i>				
<b>Graduate Assistants (Include salaries and/or stipends.)<sup>26</sup></b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Student Employees (Include salaries and/or stipends.)</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Equipment and Instructional Materials</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:	<i>While the potential for use of funds for equipment and instructional materials exists, such is represented in course development and offering payments above. Use of those funds are to be determined by the department and/or instructor.</i>				
<b>Library (Include new journal subscriptions, collections, and electronic access.)</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:	<i>While the potential for use of funds for library resources exists, such is represented in course development and offering payments above. Use of those funds are to be determined by the department and/or instructor.</i>				
<b>Contractual Services</b>					
	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	0	0	0	0	0

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

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

**NEW MASTER'S DEGREE PROGRAM**

Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Academic and/or Student Services</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Other Support Services</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Faculty Development (Include travel, conference fees, consultants, etc.)</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:	<i>While the potential for use of funds for faculty development exists, such is represented in course development and offering payments above. Use of those funds are to be determined by the department and/or instructor.</i>				
<b>Assessment (Include personnel, software tools, data collection tools, survey administration, outside consulting services, etc.)</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:	<i>Assessment will be the purview of the program DGS and STO committee.</i>				
<b>Student Space and Equipment</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0
Narrative Explanation/Justification:					
<b>Other</b>	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
New	0	0	0	0	0
Existing	0	0	0	0	0

**NEW MASTER'S DEGREE PROGRAM**

Narrative Explanation/Justification:					
<b>Total Expenses/Requirements</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
New	160,300	119,424	92,093	73,608	76,744
Existing	0	0	0	0	0
<b>TOTAL Program Budgeted Expenses/Requirements:</b>	522,170				
<b>GRAND TOTAL</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
Total Funding Sources	<u>242,827</u>	<u>168,224</u>	<u>136,307</u>	<u>187,195</u>	<u>241,013</u>
Total Expenses/Requirements	<u>160,300</u>	<u>119,424</u>	<u>92,093</u>	<u>73,608</u>	<u>76,744</u>
<b>TOTAL NET COST:</b>	<u>82,527</u>	<u>48,800</u>	<u>44,213</u>	<u>113,586</u>	<u>164,269</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)
STO 601	<i>This course is designed to help students design, implement, and evaluate educational and social programs using a logic-based framework. (Existing course: CLD/SOC 665, being developed for online delivery)</i>
STO 602	<i>Students will explore, translate and interpret scientific findings into application and policy through the Master of Science curriculum in Science Translation and Outreach. Readings will focus on basic principles and theories relevant to scientific literacy and the public perception and trust of scientific information. Where possible, we will use current controversial topics as examples. Students will enhance their scientific literacy and learn to evaluate the credibility of sources of scientific information, principally by:</i> <ul style="list-style-type: none"> <li>• <i>Examining scientific methodologies including its potential and limitations</i></li> <li>• <i>Practicing critical and reflective thinking on relevant scientific issues</i></li> <li>• <i>Reviewing scientific literature and evaluating its merits</i></li> <li>• <i>Designing an original, evidence-based learning module of a public interest issue (new course)</i></li> </ul>
STO 603	<i>This course provides students with foundational knowledge for scientific inquiry and the use of research to inform evidence-based practice. It covers fundamentals of understanding, analyzing, and critiquing research, through an exposure to science philosophy and techniques used to conduct scientific investigations. It covers aspects of the research process from developing a research question to writing the research report. Students will be introduced to qualitative and quantitative research design, methodology, and ethical issues associated with conducting and evaluating research. (new course)</i>
STO 650	<i>Students will integrate transdisciplinary learning obtained through the Master of Science curriculum in Science Translation and Outreach, principally through:(1) identifying an issue of public interest;(2) designing an original, evidence-based project of applied research and/or outreach to address the issue;(3) developing an evaluation plan for the project; and (4) executing the project in part or in its entirety, as time and resources permit. (new course)</i>



**NEW MASTER'S DEGREE PROGRAM**

<b>19b</b>	<b>Program Guided Electives Courses (for the major)</b>
------------	---

Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)

<b>19c</b>	<b>Program Free Electives Courses</b>
------------	---------------------------------------

Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)
	<i>See the document, "Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach in Agriculture, Food and Environment"</i>

<b>19d</b>	<b>Courses for a Track.</b> (If multiple tracks are available, click <a href="#">HERE</a> for a template for additional tracks. Append a PDF to the end of this form with each track's courses and descriptions.)	
------------	---	--

Prefix & Number	Course Type	Course Description (from the Bulletin or the most recent new/change course form)
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	
	<input type="checkbox"/> Track Core	

**NEW MASTER'S DEGREE PROGRAM**

<input type="checkbox"/> Track Elective	
<input type="checkbox"/> Track Core	
<input type="checkbox"/> Track Elective	
<input type="checkbox"/> Track Core	
<input type="checkbox"/> Track Elective	
<input type="checkbox"/> Track Core	
<input type="checkbox"/> Track Elective	

## Vincelli, Paul

---

**From:** Grabau, Larry  
**Sent:** Saturday, July 28, 2018 12:13 PM  
**To:** Pearson, RaeAnne; Vincelli, Paul  
**Cc:** Brown, Roger  
**Subject:** RE: Online M.S. Program in CAFE

Thanks for your valuable suggestions, RaeAnne. I would agree regarding a more substantial description of the program for the CPE (as you say, as a selling point for the program).

My take on the CIP code selections, Paul and Roger, is that we avoid the ones associated with CLD and AICU, even if they are BS level. We do have an MS program in CLD (not sure what that CIP code might be—would be a bit odd if it were different, RaeAnne).

Of the three choices, it seems that **01.0801** would come closest to our “STO” intentions (although not quite entirely on point).

With respect, Larry G.

---

**From:** Pearson, RaeAnne  
**Sent:** Thursday, July 26, 2018 4:01 PM  
**To:** Vincelli, Paul <paul.vincelli@uky.edu>  
**Cc:** Grabau, Larry <larry.grabau@uky.edu>; Brown, Roger <rogerbrown@uky.edu>  
**Subject:** Re: Online M.S. Program in CAFE

Paul,

Thank you. I got caught up in some things so I apologize for the delay.

For CPE, I think the description could be elaborated a bit more. Your audience will be people who know nothing of the field and in some ways you will be "selling" this program to the Council staff and the Council members. You can speak about the population served, the type of jobs the program prepares students for, and possibly some more description of the curriculum.

Regarding CIP Codes, these are nationally defined program descriptions, that are updated approximately every 10 years-so they don't necessarily keep up with educational trends.

CIP Codes are arranged in a hierarchy from the Broad Discipline down to the Program:

- 01) Agriculture, Agriculture Operations, and Related Sciences
  - 01.00) Agriculture, General
    - 01.0801) Agricultural and Extension Education Services.

You are welcome to review other options (<https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55>), but I am providing you with three options as well. I have also noted if CAFE has another program with the same CIP Code, as long as it isn't at the same degree level it is okay to have more than one program with the same CIP Code):

**CIP Code 01.0801**

**Title:** Agricultural and Extension Education Services.

**Definition:** A program that prepares individuals to provide referral, consulting, technical assistance, and educational services to gardeners, farmers, ranchers, agribusinesses, and other organizations. Includes instruction in basic agricultural sciences, agricultural business operations, pest control, adult education methods, public relations, applicable state laws and regulations, and communication skills.

**CIP Code 01.0899 (CAFE has a Community & Leadership Development, BSCLD listed for this CIP)**

**Title:** Agricultural Public Services, Other.

**Definition:** Any instructional program in general agricultural sciences and related services not listed above.

**CIP Code 01.999 (CAFE has an Individualized Curriculum, BSAG listed for this CIP)**

**Title:** Agriculture, Agriculture Operations, and Related Sciences, Other.

**Definition:** Any instructional program in agriculture, agricultural operations, and related sciences not listed above.

When you have ironed out the description and the CIP Code you can enter the NOI here:

[https://uky.az1.qualtrics.com/jfe/form/SV\\_3miQOxAUa9rAGRT](https://uky.az1.qualtrics.com/jfe/form/SV_3miQOxAUa9rAGRT)

You will be able to save your work and return to it if you simply want to review the form or begin entering information before fully submitting to our office. Please note that this is the information we use to submit an NOI to CPE.

Please let me know if we can be of more assistance or answer any additional questions.

Best,  
RaeAnne

---

**From:** Vincelli, Paul  
**Sent:** Thursday, July 26, 2018 9:58:32 AM  
**To:** Pearson, RaeAnne  
**Cc:** Grabau, Larry; Brown, Roger  
**Subject:** Online M.S. Program in CAFE

RaeAnne:

Thanks so much for the phone call.

Here is a rough draft of the program description:

### **Online M.S. in Science Translation and Outreach in Agriculture, Food and Environment**

A systematic introduction to: (1) identifying, interpreting, and communicating credible scientific information; and (2) creating and evaluating science-based programming that contributes to addressing societal issues of concern.

While it may change in response to committee feedback, this gives a pretty good start.

With respect,  
Paul

---

**Paul Vincelli**  
Extension Professor and Provost's Distinguished Service Professor  
UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)  
Senior Councilor at Large, American Phytopathological Society

Department of Plant Pathology  
College of Agriculture, Food and Environment  
University of Kentucky  
[pvincell@uky.edu](mailto:pvincell@uky.edu)  
Phone 859-218-0722  
Website: <http://plantpathology.ca.uky.edu/person/paul-vincelli>  
Twitter: [@pvincell](https://twitter.com/pvincell)

## **Online M.S. in Science Translation and Outreach (STO) in Agriculture, Food and Environment**

Draft curriculum 19 Feb 2019

### **Program Description**

A transdisciplinary program that builds student capacity to identify credible scientific information and incorporate that into programs relevant to issues of public concern. Applications of these skills will occur in potentially any issue relating to agriculture, food and environment.

### **Core Courses (12 credits, required)**

**Program Development and Evaluation (STO 601 [CLD/SOC 665], 3 cr).** The purpose of this course is to provide a basic understanding of program evaluation processes, concepts, and theories and to develop expertise needed to design and conduct systematic evaluations of formal and non-formal programs. The material to be covered is applicable to a wide range of topics and disciplines, including social welfare, youth development, family studies, agriculture and the environment, community/economic development, and other formal and non-formal educational programs. Such programs have a common goal of achieving their desired objectives and being held accountable for the resources they obtain from agencies and stakeholders.

Because program evaluation is part of a larger interdisciplinary content area that includes research design and methods, the course will briefly cover needs assessment and asset building, with program development also being a necessary component. The majority of the course will focus on evaluation design, methods, and implementation. A range of program evaluation and research methods will be presented, and students will be encouraged to identify those approaches that most closely match their own philosophical perspectives, as well as strategies that will be utilized by their groups, organizations and current/future employers. Students will participate in class discussions and activities, reflecting on any experience working with community programs when applicable. Web-based publications, journal articles and the assigned text readings will comprise the content of the course.

**Science Literacy and Translation (STO 602, 3 cr).** Students will explore, translate and interpret scientific findings into application and policy, enhance their scientific literacy, and learn to evaluate the credibility of sources of scientific information, principally by:

- Examining scientific methodologies including its potential and limitations
- Practicing critical and reflective thinking on relevant scientific issues
- Reviewing scientific literature and evaluating its merits
- Designing an original, evidence - based learning module of a public interest issue

**Research Methods (STO 603, 3 cr).** This course provides students with foundational knowledge for scientific inquiry and the use of research to inform evidence-based practice. It covers fundamentals of understanding, analyzing, and critiquing research, through an exposure to science philosophy and techniques used to conduct scientific investigations. It covers aspects of the research process from developing a research question to writing the research report. Students will be introduced to qualitative

and quantitative research design, methodology, and ethical issues associated with conducting and evaluating research.

### **Capstone in Science Translation (STO 650, 3 cr).**

Students in this course use principles of science translation and outreach to (1) Identify an issue of public concern; (2) Design an original, evidence-based outreach program to address the concern; (3) Create a program implementation plan; and (4) Develop an evaluation plan for the program.

### **Elective Courses (18 credits)**

In consultation with their advisory committee and subject to approval of the Director of Graduate Studies, students will develop individualized programs of study totaling at least 18 credit hours of elective courses. Electives may be chosen from any academic unit in the College of Agriculture, Food and Environment, including AEC, AFS, BAE, CLD, DHN, ENT, FAM, FOR, PLS, PPA, and RTM. Elective courses from other UK colleges may be considered with the approval of a student's advisory committee and the STO DGS. Courses at the 600 level, 500 level, and 400G level will be acceptable, subject to the following conditions:

- Advisory Committee/DGS approval;
- The program of study is constituted of no more than 15 credit-hours of 400G-level plus 500-level courses.

While the core curriculum provides learning appropriate to the practice of science translation, elective courses serve several purposes: (1) To allow students to gain deeper knowledge in the disciplinary area of their undergraduate degree; and (2) To gain broader, transdisciplinary exposure to less familiar science content, expanding their capacity to translate science content to lay audiences. Advisory committees will have the responsibility to ensure that students enroll in electives of both types. Such flexibility reflects the great diversity of programmatic challenges our students will encounter over their careers, particularly Extension agents.

### **Other Requirements**

Students will select an advisor by the completion of six credits. Students will form a graduate advisory committee<sup>1</sup> by the completion of nine credits of coursework. Completion of program requirements include passing a final online oral Exit Exam administered by the student's graduate committee. Content of the final oral exam will include an oral report on the student's capstone project and may include questions on general curriculum content from core courses and/or elective courses.

### **Admission**

Admission will be based on procedures described in the current Graduate School Bulletin.

---

<sup>1</sup> As per the UK Graduate Bulletin, "the examining committee consists of at least three qualified faculty members recommended by the Director of Graduate Studies and appointed by the Dean of the Graduate School. At least two committee members (including the chair or co-chair) must be members of the Graduate Faculty, and at least one of the two must be a Full member of the Graduate Faculty." Students will have considerable flexibility in selecting additional members of their advisory committee, providing individuals selected have some relevance to the student's professional interests and needs. Additional members of the advisory committee may include community partners in the public sector but outside academia, in the private sector, or in government. All committee members are subject to the approval of the DGS.

Graduate Curriculum Committee (GCC) e-Meeting Minutes, November 14-21, 2018.  
Recorded by Larry J. Grabau.

Members present: Coyne, Dillon, Dyk, Haynes, Howe, Wesley; Grabau (non-voting).  
Guests present: Vincelli, Hunter, Brown, Mains

Agenda items:

- i) After three successive face-to-face meetings with discussions about the following proposed online programs:
  - a. Science Translation and Outreach M.S.,
  - b. Family and Consumer Sciences Graduate Certificate, and
  - c. Positive Youth Development Graduate Certificate, and
- ii) A dozen course proposals (eleven new and one major change—CLD 665)
  - a. CLD 665 (adds online modality and STO 601 crosslist)
  - b. STO 602
  - c. STO 603
  - d. STO 604
  - e. FCS 600
  - f. FCS 610
  - g. FCS 620
  - h. FCS 695
  - i. PYD 600
  - j. PYD 610
  - k. PYD 620
  - l. PYD 695,

the GCC appeared ready to have its final conversations about this package of materials via e-mail. By the noon deadline on November 21, 6 of the 9 GCC members had registered their favorable votes for all three programs and all twelve course proposals. The remaining three GCC members did not respond. **Thus, the proposals and courses passed by a unanimous 6-0 GCC vote.**



**List of Proposed Graduate Faculty of Record in the  
Online M.S. Program in Science Translation and Outreach (STO)  
In the  
College of Agriculture, Food and Environment  
Feb 2019**

The proposed “home” for the online Master of Science degree in Science Translation and Outreach is the College of Agriculture, Food and Environment. The STO planning committee proposes that initial and all subsequent educational policy-making responsibilities for the STO program shall be moved from the college faculty in total to the narrower group of proposed STO Graduate Faculty of Record listed below:

**Proposed STO Graduate Faculty Members**

Paul Vincelli (PPA), Anticipated DGS  
Roger Brown (AEC)  
Carl Dillon (AEC)  
Clare Rittschof (ENT)  
Jennifer Hunter (FAM)  
Rick Bennett (PPA)  
Kenneth Jones (CLD)  
Josh McGrath (PLS)

**Appointment**

The STO Graduate Faculty of Record, the policy-setting body, will be comprised of faculty members from diverse departments in the College of Agriculture, Food and Environment (CAFE) with a desire to provide curricular oversight and decision-making as well as periodic service on STO graduate advisory committees. Appointment will be for indeterminate periods, based on continuing interest. New members will be appointed by a 2/3 vote of the STO Graduate Faculty. Removal will be based on expression of such a desire by the individual faculty member, or by majority vote of STO faculty of record. The Anticipated DGS was nominated and approved on 20 Nov 2018 by unanimous vote of faculty members serving on the STO planning committee who hold appointments in the UK Graduate School. Future DGS appointments will be subject to 2/3 vote by the STO Graduate Faculty of record, in consultation with the chair of the nominee’s department and the dean of the CAFE. The DGS will continue to serve in this capacity based on ongoing interest or until a majority vote for removal.

**Notes**

Other qualified UK professionals may participate in policy discussions of the STO Graduate Faculty. However, voting privileges are reserved for members of the STO Graduate Faculty of Record.



## Degree Plan for STO Curriculum

**Table 1. STO Degree Plan I<sup>a</sup>**

<b>Year 1: Fall, 2019</b>	STO 603	<b>Year 1: Spring, 2020</b>	STO 602
<b>Year 1: Summer, 2020</b>	STO 601	---	---
<b>Year 2: Fall, 2020</b>	Elective 1	<b>Year 2: Spring, 2021</b>	Elective 2
<b>Year 3: Fall, 2021</b>	Elective 3	<b>Year 3: Spring, 2022</b>	Elective 4
<b>Year 4: Fall, 2022</b>	Elective 5	<b>Year 4: Spring, 2023</b>	Elective 6
<b>Year 5: Fall, 2023</b>	STO 650	---	---

<sup>a</sup>Assumes part-time attendance, completes six graduate-level credits per year. Sequence of completion of STO 601-603 is immaterial.

**Table 2. STO Degree Plan II<sup>b</sup>**

<b>Year 1: Fall, 2019</b>	STO 603 Elective 1	<b>Year 1: Spring, 2020</b>	STO 602 Elective 2
<b>Year 1: Summer, 2020</b>	STO 601	---	---
<b>Year 2: Fall, 2020</b>	Elective 3 Elective 4	<b>Year 2: Spring, 2021</b>	Elective 5 Elective 6
<b>Year 3: Fall, 2021</b>	STO 650	<b>Year 3: Spring, 2022</b>	---

<sup>b</sup>Assumes part-time attendance, accelerated course schedule. Sequence of completion of STO 601-603 is immaterial.

## **Plan for Development of Electives for the Online M.S. Curriculum in Science Translation and Outreach in the College of Agriculture, Food and Environment (CAFE)**

The proposed Science Translation and Outreach (STO) curriculum in the College of Agriculture, Food and Environment will require 18 credits of free electives during one's graduate studies (Tables 1-2). Students have the freedom to select elective courses on wide-ranging topics of professional interest, with the proviso that they must explain and defend their choices for approval by their Graduate Advisory Committee. Electives may be chosen from any of the academic units in the College of Agriculture, Food and Environment, including:

- Agricultural Economics (AEC)
- Animal and Food Science (AFS)
- Biosystems and Agricultural Engineering (BAE)
- Community and Leadership Development (CLD)
- Entomology (ENT)
- Family Sciences (FAM)
- Forest and Natural Resource Science (FOR)
- Horticulture and Plant and Soil Sciences (PLS)
- Nutrition and Food Systems (DHN)
- Plant Pathology (PPA)
- Retailing and Tourism Management (RTM)

Elective courses from other UK colleges may be considered with the approval of a student's Advisory Committee and the STO DGS. Courses at the 600 level, 500 level, and 400G level will be acceptable, subject to Graduate School guidelines and approval as described above.

Courses at the 600 level, 500 level, and 400G level will be acceptable, subject to the following conditions:

- Advisory Committee/DGS approval;
- The program of study is constituted of no more than 15 credit-hours of 400G-level plus 500-level courses.

While the core curriculum provides learning appropriate to the practice of science translation, elective courses serve several purposes: (1) To allow students to gain deeper knowledge in a disciplinary area of interest; and (2) To gain broader, transdisciplinary exposure to less familiar science content, expanding their capacity to translate science content to lay audiences. Advisory Committees will be responsible for ensuring that students select electives of both types. Such flexibility reflects the great diversity of programmatic challenges that our students will encounter over their careers. This is particularly the case for Extension agents throughout Kentucky and beyond, who will form a natural pool of potential students interested in this program and new to UK.

**Table 1. STO Degree Plan I<sup>a</sup>**

<b>Year 1: Fall, 2019</b>	STO 603	<b>Year 1: Spring, 2020</b>	STO 602
<b>Year 1: Summer, 2020</b>	STO 601	---	---
<b>Year 2: Fall, 2020</b>	Elective 1	<b>Year 2: Spring, 2021</b>	Elective 2
<b>Year 3: Fall, 2021</b>	Elective 3	<b>Year 3: Spring, 2022</b>	Elective 4
<b>Year 4: Fall, 2022</b>	Elective 5	<b>Year 4: Spring, 2023</b>	Elective 6
<b>Year 5: Fall, 2023</b>	STO 650	---	---

<sup>a</sup>Assumes part-time attendance, completes six graduate-level credits per year. Sequence of completion of STO 601-603 is immaterial.

**Table 2. STO Degree Plan II<sup>b</sup>**

<b>Year 1: Fall, 2019</b>	STO 603 Elective 1	<b>Year 1: Spring, 2020</b>	STO 602 Elective 2
<b>Year 1: Summer, 2020</b>	STO 601	---	---
<b>Year 2: Fall, 2020</b>	Elective 3 Elective 4	<b>Year 2: Spring, 2021</b>	Elective 5 Elective 6
<b>Year 3: Fall, 2021</b>	STO 650	<b>Year 3: Spring, 2022</b>	---

<sup>b</sup>Assumes part-time attendance, accelerated course schedule. Sequence of completion of STO 601-603 is immaterial.

### Immediate Needs for Development of Elective Courses

The STO curriculum does not have defined areas of specialization, but it is possible to anticipate general programmatic interests from several populations of remote students new to UK: those with general interests in agriculture and natural resources (ANR<sup>1</sup>), those interested in family and consumer sciences (FCS), and those interested in Positive Youth Development (PYD).

In this developmental stage of the STO program, the subject matter areas of PYD and FCS are expected to be of interest to at least half of our expected student population. Therefore, members of the STO committee with expertise in FCS and PYD are shepherding through the approval process, a number of **courses to serve as elective options for students with interests in either of these two areas (Table 3). These electives also support the embedded graduate certificates in PYD and FCS.** These electives have been launched in Curriculog. Approval of these courses—coupled with already available online offerings through PPA and the School of Human Environmental Sciences (Table 4)—will ensure the availability of more than the minimum number of electives for a complete program for all incoming STO students. Approval and offering of the courses listed in Table 3 will not, of course, preclude the future development of additional electives in FCS/PYD, in order to give students more options for electives. However, in order to be accountable to our incoming students, the STO program must be prepared to offer a minimum of six electives, and our present plan exceeds that requirement for students entering in Fall, 2019.

<sup>1</sup> Includes students specializing in Horticulture, for the purposes of this analysis.

**Table 3. Set of Initial Online Elective Choices for Students Interested in FCS/PYD Areas**

<b>Course prefix and number</b>	<b>Course title</b>	<b>Status (26 Nov 2018)<sup>2</sup></b>
PYD 600	Contemporary Issues in Youth and Agriculture	Launched in Curriculog
PYD 610	Engaging the Learner: Exploring Brain-Based Learning	Launched in Curriculog
PYD 620	Foundations of Positive Youth Development	Launched in Curriculog
PYD 695	Independent Work in Positive Youth Development	Launched in Curriculog
FCS 600	Foundations of Family and Consumer Sciences	Launched in Curriculog
FCS 610	Media Technology, Families, and Society	Launched in Curriculog
FCS 620	Working with Diverse Families in Culturally Sensitive Contexts	Launched in Curriculog
FCS 695	Independent Work in Family and Consumer Sciences	Launched in Curriculog
FAM 600	Working with Military Families	Available online

**Table 4. Set of Existing Online Elective Choices for STO Students**

<b>Course prefix and number</b>	<b>Course title</b>	<b>Status (26 Nov 2018)</b>
HMT 570	Event Planning and Coordination (3 cr)	Available online
MAT 514	Retail Entrepreneurship (3 cr)	Available online
MAT 570	Electronic Retailing (E-Tailing) (3 cr)	Available online
RTM 772	Seminar in Retailing and Tourism Management (3 cr)	Available online
FAM 600	Working with Military Families (3 cr)	Available online
PPA 620	Fungicides, Advanced Topics (3 cr)	Available online
PPA 630	Introduction to Genetically Engineered Crops, Risks and Benefits I (1 cr)	Available online
PPA 631	Introduction to Genetically Engineered Crops, Risks and Benefits II (1 cr)	Available online

For long-term viability of the STO program across wide interests, the program will need a greater range of elective options. Part-time students with interests in ANR will need at least 1-2 elective options per semester for a minimum total of six elective courses; full-time students will require even more course offerings. Furthermore, students with interests in ANR will have remarkably wide-ranging interests and needs. Therefore, if we assume a cohort size of 10 students new to UK each year, in order to provide them with a desirable level of choice, we need a minimum of three novel courses in each of six semesters, for a total of **18 elective courses over four years in the general area of ANR.**

<sup>2</sup> Launched courses are pending review by the Graduate Council

### Long-term Needs for Course Development

In the long run, even more elective options in FCS, PYD, and ANR would be highly desirable, for two reasons:

1. To provide more choice in learning opportunities to our students, who have diverse needs and interests, in order to better-serve their educational requirements and to increase the competitiveness of this program regionally and nationally; and,
2. To create a “buffer” of suitable elective courses, since there are numerous unanticipated reasons why a particular elective course may not available to STO students, including—but not limited to—departure or retirement of faculty members.

Therefore, **over the long term, the following is recommended** for the STO program to be sustainable and adequately serve students’ needs:

- A minimum of 20-24 elective courses, offered on a regular basis, for students with a general interest in ANR; and,
- A minimum of 8-10 elective options, offered regularly, for those interested in FCS or PYD.

### **What is the Potential for Further Elective Course Development?**

Recognizing that the needs expressed above are ambitious, how likely is it that CAFE faculty will develop this many electives suitable for STO students?<sup>3</sup> A promising indication<sup>4</sup> was provided by the Department of Plant and Soil Sciences, whose recent preliminary survey showed that the faculty from that department was willing to do the following within three years, in support of this program:

- Convert at least three courses offered face-to-face to an online format
- Create at least seven entirely new online courses

Communications with faculty in nine units have revealed widespread interest in developing one or more courses in each unit, courses which would serve their own graduate program while simultaneously serving the needs of STO students. New online graduate courses that have been proposed informally by faculty members include:

- Principles of Cooperative Extension
- Livestock Feed Science
- Farm Management
- Insect Biodiversity
- Agrostology: The Science of Grasses
- Soil Microbiology
- Soil Use and Management
- Soil Health and How to Measure It
- Math & Statistics for Soil Scientists

---

<sup>3</sup> STO students will require courses that are fully online (in order to permit access irrespective of location) and free from prerequisite courses, requiring only a baccalaureate degree (in order to support development of transdisciplinary knowledge and skills by permitting students to freely select electives of relevance to their needs and interests).

<sup>4</sup> These assessments were based on an assumption of a total of \$10,000 in incentive funds for course development and first-time delivery.

- Soil Fertility
- Wildlife Damage and Diseases: Concepts, Management, and Communicating with the Public
- Agricultural Machinery and Hydraulics
- Energy: Use, Savings, and Generation
- Stream Restoration
- Forest Entomology
- Medical Entomology
- Agroecology
- Identification of Pests and Disease Vectors
- Integrated Pest Management
- Physiology and Toxicology of Insecticides

Courses currently being converted to, or created for, online delivery include:

- DHN 597: Obesity and Food Insecurity Paradigm – From Cell to Society
- DHN 598: Global Foods, Diet and Culture
- DHN 603: Advanced Community Program Development
- DHN 605: Food Systems and Society

Courses being considered for conversion to online delivery include:

- CLD/SOC/ANT 640: Science, Agriculture, and Development
- CLD/SOC/AEC 691: Sociology of Food and Agriculture

Several online CAFE graduate programs funded by the Provost are very likely to produce one or more courses that will be suitable as STO electives:

- M.S. in Applied Environmental Studies (with Arts and Sciences)
- M.S. in Entomology
- Graduate Certificate in Applied Nutrition and Culinary Medicine for Health Professionals (with Medicine and Health Science)(includes several DHN courses listed above)

We therefore feel confident that, with suitable incentives, the CAFE has the capacity to generate the elective courses needed to support an excellent transdisciplinary program in science translation and outreach.

### **STO Incentive Plan**

A critical element undergirding the willingness of departmentally based faculty to develop electives suitable for the transdisciplinary STO program is the availability of incentive funds for both course design/development and delivery. Being transdisciplinary, the STO program will not be housed in any single academic unit. Therefore, incentives for course development, delivery, and continual improvement must be provided.

The STO faculty consider the following to be a highly desirable incentive program for 3-credit-hour graduate courses:



- Design and development of a new, fully online course, free of prerequisites, or conversion of an in-class version meeting the same conditions: **\$5000**
- Initial delivery of a new fully online course: **\$5000<sup>5</sup>**
- Incentive of **\$400 (after the initial delivery)** for each STO student taking a suitable elective that is taught by an instructor within their standard duty profile. (This is important because disciplinary educational units sometimes object to requests for recurring teaching support for interdisciplinary programs without receiving additional recurring revenue.)
- Per-course award (after initial delivery) of **\$4500**, for a suitable core course or elective taught by instructors outside their standard assignment and duty profile

Successful launch of the STO Program is supported by two sources of funding:

- A commitment from the Dean of the CAFE of a total of \$180,000 from FY18-19 through FY20-21;
- A commitment of \$100,000 from the UK Provost's 2018 New Online Program Initiative.

Funds will be used to support the development and delivery of the following, all of which will attract students new to UK's graduate programs:

- The new online M.S. in Science Translation and Outreach;
- An embedded Graduate Certificate in Positive Youth Development;
- An embedded Graduate Certificate in Family and Consumer Sciences.

These funds will allow the CAFE to successfully launch these three new graduate programs and shepherd them to a state of financial sustainability and independence. Our budget analysis indicates that, if fully funded, a total of 25 new graduate courses (four STO core courses and 21 new elective courses across numerous CAFE departments) will have been fully funded and delivered over by FY2022-23, with increasing projected outflow (and an assurance of sustainability) by FY2023-24. (See the appended document, *Spreadsheet Undergirding the STO Business Plan*.) This analysis<sup>6</sup> is based on the conservative assumption of only ten new part-time students per year, in order to conservatively gauge program sustainability. An even more favorable financial picture is expected with higher enrollment.

## Conclusion

The STO faculty believes that our plan to provide incentives for ongoing elective development well into the future is both eminently attainable and critical to the success of this transdisciplinary program. Our plan will provide critical funding incentives for the development of departmental online courses, which simultaneously serve as STO electives. This will not only support the STO program—it will help incentivize and support the movement of numerous of CAFE's graduate courses to the online arena, a desirable outcome independent of its benefit to the STO program. In other words, ***we believe the CAFE's presence as a whole in the online arena will directly and synergistically benefit from the ongoing STO incentive program.*** Finally, this plan is supporting

---

<sup>5</sup> The total of \$10,000 for course development and initial delivery is based on the minimum incentive offered by a benchmark institution visited during February, 2018. Details available upon request.

<sup>6</sup> Spreadsheet available upon request to Paul Vincelli, [pvincell@uky.edu](mailto:pvincell@uky.edu)

the development and launch of two graduate certificates embedded within the STO program. All three graduate programs will attract students new to the UK College of Agriculture, Food and Environment.

# Spreadsheet Undergirding STO M.S. Program Business Plan

	Academic Year					
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
<b>Projected Student Enrollment</b>						
First Year Students	0	10	10	10	10	10
Second Year Students		0	10	10	10	10
Third Year Students			0	10	10	10
Fourth Year Students				0	10	10
Fifth Year Students					0	10
<b>Total Students in Program</b>	<b>0</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>	<b>50</b>
<b>Projected Tuition Revenue</b>						
Tuition/Credit Hour by Year	\$ 693	\$ 714	\$ 735	\$ 757	\$ 780	\$ 803
Average Credits per Student per Year	0	6	6	6	6	6
<b>Tuition Generated By Program</b>	<b>-</b>	<b>\$ 42,827</b>	<b>\$ 88,224</b>	<b>\$ 136,307</b>	<b>\$ 187,195</b>	<b>\$ 241,013</b>
<b>Tuition Sharing Effects</b>						
Tuition Retained by Central Campus (40%)	-	17,131	35,290	54,523	74,878	96,405
Tuition Retained by College (CAFE 20%)	-	8,565	17,645	27,261	37,439	48,203
<b>Tuition Available for Program (40%)</b>	<b>-</b>	<b>17,131</b>	<b>35,290</b>	<b>54,523</b>	<b>74,878</b>	<b>96,405</b>
<b>Additional Projected Program Revenues</b>						
Program Course Fees	-	-	-	-	-	-
CAFE Dean Support	\$ 50,000	\$ 50,000	\$ 80,000	-	-	-
RFP Funds for MS Program (STO)	\$ 50,000	\$ 50,000	-	-	-	-
RFP Funds Certificate Programs (FCS & PYD)	\$ -	\$ -	-	-	-	-
Amount Forwarded from Prior Year	-	\$ 42,300	\$ 64,983	\$ 67,396	\$ 24,079	\$ 2,867
<b>Total Program Revenues</b>	<b>\$ 100,000</b>	<b>\$ 159,431</b>	<b>\$ 180,273</b>	<b>\$ 121,918</b>	<b>\$ 98,957</b>	<b>\$ 99,272</b>
<b>Projected Program Costs</b>						
Program DGS Salary	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927	\$ 11,255	\$ 11,593
Course Development	\$ 45,000	\$ 35,000	\$ 20,000	\$ 15,000	\$ 10,000	\$ -
First-Time Course Delivery	-	\$ 45,000	\$ 35,000	\$ 20,000	\$ 15,000	\$ 10,000
Ongoing Course Delivery (per course total)	-	-	\$ 42,966	\$ 44,255	\$ 50,648	\$ 52,167
Ongoing Course Delivery (per student total)	-	-	\$ -	\$ 6,119	\$ 9,004	\$ 12,056
<b>Total Program Costs</b>	<b>\$ 55,000</b>	<b>\$ 90,300</b>	<b>\$ 108,575</b>	<b>\$ 96,302</b>	<b>\$ 95,907</b>	<b>\$ 85,817</b>
<b>Net Revenue for Ongoing Program Improvements</b>						
<b>Net Revenue</b>	<b>\$ 45,000</b>	<b>\$ 69,131</b>	<b>\$ 71,697</b>	<b>\$ 25,616</b>	<b>\$ 3,050</b>	<b>\$ 13,456</b>

**Notes**

*Student attrition/retention effects are excluded*

*Elective courses are allocated either a per course or per student incentive but not both*

**Data and Additional Assumptions**

*Initial Tuition Rates are for 2018-19 Academic Year Part-time Graduate Student In-State Tuition*

100,000	142,827	168,224	136,307	187,195	241,013
45,000	52,527	59,649	40,005	91,288	155,197

## Assumptions

New Students Annually	10	Assumptions with Gold Background			
Average Time to Degree (yrs)	5	especially can be changed			
Credit Hrs Required	30				
Average Credits Outside of Program	0				
Credits Within Program	30				
Average Credits/Year (In Program)	6				
Tuition/Credit Hour - Year 1 (\$)	\$ 693.00	<a href="http://www.uky.edu/registrar/2018-19-Tu">http://www.uky.edu/registrar/2018-19-Tu</a>			
Tuition Inflation Rate (%)	3.0%	See Inflation Rate sheet herein for guidance			
UK Tuition Share (%)	40.0%				
CAFE Tuition Share (%)	20.0%				
Program Tuition Share (%)	40.0%				
Program Course Fee/Credit Hour	\$ -				
Core Courses Offered Annually	4				
Course Development & First Offer Incentive	\$ 10,000				
Amount of Course Development Up Front	\$ 5,000				
Core Course Stipend (Per 3 Cr Hr Course)	\$ 4,500				
Areas of Concentration	3				
Elective Courses Offered Annually (Minimum)	18				
Elective Courses Offered Annually (Actual)	21	21			
<b>Elective Courses under per Course Incentive</b>					
Number of Courses Annually	6				
Course Stipend (Per 3 Cr Hr Course)	\$ 4,500				
<b>Elective Courses under per Student Incentive</b>					
Number of Courses Annually	15				
Average Students/Elective Course	2.00				
Elective Course Stipend/Student	\$ 400				
Expenses Inflation Rate (%)	3.0%				
<b>Number of New Courses Developed by Year (Initial Offering the Following Year)</b>					
	2018/19	2019/20	2020/21	2021/22	2022/23
Core	3	0	1		
Electives	6	7	3	3	2
<b>Number of Courses Offered by Year</b>					
Core (with per course stipend)	None	3	3	4	4
Electives (with per course stipend)	None	6	6	6	6
Electives (with per student stipend)	None	0	7	10	13
<b>Carryover Percentage Applied</b>	94.0%				

### Notes

*Student attrition/retention effects are excluded*

*Elective courses are allocated either a per course or per student incentive but not both*

### Data and Additional Assumptions

*Tuition share per student (3 cr hr course) is  $\$693 * 3 * 40\% = \$831.60$  initially*

*Initial Tuition Rates are for 2018-19 Academic Year Part-time Graduate Student In-State Tuition*

[ition](#)

ce

2023/24

4

6

15

# ASSESSMENT PLAN: STUDENT LEARNING OUTCOMES

## Online M.S. Program in Science Translation and Outreach (STO) In the College of Agriculture, Food and Environment (CAFE)

University of Kentucky

### STO Student Learning Outcomes

1. Engage with diverse audiences and explore information sources to ascertain issues of concern relating to agriculture, food and environment and their transdisciplinary relationships
2. Locate, identify and evaluate the credibility of relevant scientific information in agriculture, food and environment, and distinguish it from non-scientific information
3. Develop and assess evidence-based outreach programs that focus on issues of public concern in agriculture, food and environment

### Curriculum Map for STO Courses\*

Course	SLO #1 Engaging	SLO #2 Identifying	SLO #3 Translating
Program Development and Evaluation (STO 601)	I		R
Science Literacy and Translation (STO 602)		I	I
Research Methods (STO 603)		I	R
Capstone in Science Translation (STO 650)	E	E	E
Electives (18 credits)			
Related to student's undergraduate major	R	R	R
Unrelated to student's undergraduate major	R	R	R

\*I=Introduce; R=Reinforce; E=Emphasize

## Methods for Assessing STO Student Learning Outcomes

- SLO #1: Representative student learning will be evaluated in STO 601 (see rubric below). The written report in STO 650 and the oral exit exam will also provide opportunities for evaluation of student accomplishment of SLO #1. For assessment of learning demonstrated in the final report from STO 650 and in the oral exam administered at the conclusion of the program, see the rubric entitled, *Scoring Rubric for Overall Performance*, below. Representative student learning will be evaluated in elective courses using an assessment rubric common across elective courses (see rubric below entitled *Common Scoring Rubric for Written or Oral Assignments in Elective Courses*).
- SLO #2: Representative student accomplishment of SLO #2 will be evaluated in STO 602 and STO 603 (see rubrics below). Representative student learning in elective courses, as well as end-of-program evaluation in STO 650, will be assessed as described above.
- SLO #3: Representative student accomplishment of SLO #3 will be evaluated in STO 601, STO 602 and STO 603 (see rubrics below). Representative student learning in elective courses, as well as end-of-program evaluation in STO 650, will be assessed as described above.

In addition to the rubrics for assessing overall accomplishment of program SLOs, we provide two additional rubrics designed by STO instructors for their internal use. They are entitled:

1. Scoring Rubric for Overall Performance in STO 602: Science Literacy and Translation
2. Final Research Proposal Assignment Due: Week 16

## Assessment Cycle and Data Analysis

- Assessment cycle
  - Program SLOs will be assessed every three years, one per year, in sequence.
- Data analysis
  - Rubrics providing data for assessing program-level SLOs will be completed by instructors of core courses and provided to the DGS.
  - Instructors of elective courses will be asked to complete the rubric provided in this document (or a revised rubric, as appropriate) and to provide the data to the DGS. Electives for evaluation will be selected by the student in consultation with their advisor to ensure alignment with each student's career goals. Instructors of the elective courses will be provided the rubric in advance to ensure incorporation of some or all of the STO concepts when giving written, oral, and multimedia communication assignments to STO students so they may be assessed by the common rubric.
  - Members of the student's Advisory Committee will be solicited for evaluations of student learning (see rubric below) based on their written final report and their performance in their exit exam. Data will be collected and summarized by the DGS.
  - All data sources mentioned will be tabulated and a report prepared annually by the DGS. The report will be distributed to the STO Graduate Faculty and to the CAFE administration. At least annually, the STO Graduate Faculty will meet virtually or in-person to discuss assessment results and to consider possible adjustments to the program and curriculum.

**Scoring Rubric for Overall Accomplishment**  
**Program Student Learning Outcomes #1 & 3**  
**STO 601, Program Development and Evaluation**

University of Kentucky Online M.S. Program in Science Translation and Outreach (STO)  
in the College of Agriculture, Food and Environment

Student: \_\_\_\_\_

<b>Program Student Learning Outcome assessed</b>	<b>Criteria</b>	<b>Novice 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score<sup>1</sup></b>
1	Engage with diverse audiences and explore information sources to ascertain issues of concern relating to agriculture, food and environment and their transdisciplinary relationships	Understands the importance of principles central to program development and evaluation practices in agriculture, food and environment	Engage in evaluative thinking as a means to address public concerns	Demonstrates capability to work collaboratively with diverse stakeholders to identify issues through needs assessments and to articulate solutions that address community-level concerns	Is capable of leading diverse stakeholders in the development of programs; conducting evaluations to determine the benefit and success programs have on individuals and communities	
3	Develop and assess evidence-based outreach programs that focus on issues of public concern in	Understands the relationship between program development processes that	Deciphers program evaluative results that are relevant and clearly	Documents measurable outcomes that are pertinent to stakeholder interests	Has the capacity to lead stakeholders through a complete program development and evaluation process; Documents the immediate success and long	



	agriculture, food and environment	help translate credible scientific information relevant to public concerns	understood by stakeholders		term effect of a program's impact on stakeholders and communities	
--	-----------------------------------	--	----------------------------	--	---	--

<sup>1</sup>Provide numerical score for each criterion or indicate if not applicable (NA)

Comments:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

**Scoring Rubric for Overall Performance**

**Student Learning Outcomes # 2 & 3**

**STO 602 Science Literacy and Translation**

**Online M.S. Program in Science Translation and Outreach (STO)**

Student: \_\_\_\_\_

<b>Program Student Learning Outcome assessed</b>	<b>Criteria</b>	<b>Novice 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score<sup>1</sup></b>
2	Locate, identify and evaluate the credibility of relevant scientific information in agriculture, food and environment.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Analysis of types of information (sources) presented does not relate to concepts or answer the research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad). Can determine key concepts and sources of information which partially relate to concepts presented.	Defines and translates the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) presented relate to concepts or answer the research question.	Effectively and thoughtfully defines and translates the scope of the research question or thesis. Types of information presented (sources) directly relate to concepts or answer the research question.	

3	Develop and assess evidence-based outreach programs that focus on issues of public concern in agriculture, food and environment.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Assesses information randomly, and analysis lacks relevance and quality.	Analyzes the scope of the research question or thesis incompletely (aspects missing or remains too broad). Can determine key concepts and principles of science methodology as they relate to concepts of the research question.	Defines and analyzes the scope of the research question or thesis completely. Can analyze key concepts and principles of science related to the topic.	Effectively defines and thoughtfully analyzes the scope of the research question and thesis. Effectively analyzes key scientific methodologies and sources of information relating to the concept and topic.	
---	--	---	--	--	--	--

<sup>1</sup>Provide numerical score for each criterion

Comments

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

## Scoring Rubric for Overall Performance in STO 602: Science Literacy and Translation<sup>1</sup>

The principal student learning outcomes for the course, STO 602, are as follows.

After completing this course, the student will be able to:

- (1) Interpret and evaluate the credibility of scientific information
- (2) Translate scientific findings into application and scientific policy
- (3) Analyze scientific principals and methodology for soundness and limitations
- (4) Practice critical and reflective thinking when examining scientific beliefs and attitudes

Student: \_\_\_\_\_

Course Student Learning Outcome assessed	Criteria	Novice 1	Developing 2	Accomplished 3	Exemplary 4	Score <sup>2</sup>
1	Scientific interpretation is a systematic process of exploring issues through the	Interprets and evaluates a topic with conclusions that are far too vague and general as to be manageable and understandable	Interprets and evaluates a topic that while conclusions are general, are too narrowly focused	Interprets and evaluates a topic with conclusions which are focused and appropriately	Interprets and evaluates a topic with focused and thoughtful conclusions that addresses potentially	

<sup>1</sup> This rubric is for scoring overall performance of individual students in STO 602; it is not an overall assessment of program student learning outcomes.

<sup>2</sup> Provide numerical score of performance

	<p>collection and analysis of evidence that result in informed conclusions. Evaluation and analysis is the process of breaking complex issues into parts to gain a better understanding of them.</p>		<p>and leaves out relevant aspects of the topic.</p>	<p>addresses relevant aspects of the topic.</p>	<p>significant yet previously less-explored aspects of the topic.</p>	
2	<p>Translating scientific findings includes an ability to know when there is a need for information, to be able to identify, evaluate, and effectively and responsibly use and share that information for application.</p>	<p>Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Analysis of types of information (sources) presented does not relate to concepts or answer the research question.</p>	<p>Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad). Can determine key concepts and sources of information which partially relate to concepts presented.</p>	<p>Defines and translates the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) presented relate to concepts or answer the research question.</p>	<p>Effectively and thoughtfully defines and translates the scope of the research question or thesis. Types of information presented (sources) directly relate to concepts or answer the research question.</p>	

3	The ability to analyze scientific principles, to effectively evaluate methodologies and to assess responsible use of that information requires an ability to understand potential and limitations.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Assesses information randomly, and analysis lacks relevance and quality.	Analyzes the scope of the research question or thesis incompletely (aspects missing or remains too broad). Can determine key concepts and principles of science methodology as they relate to concepts of the research question.	Defines and analyzes the scope of the research question or thesis completely. Can analyze key concepts and principles of science related to the topic.	Effectively defines and thoughtfully analyzes the scope of the research question and thesis. Effectively analyzes key scientific methodologies and sources of information relating to the concept and topic.	
4	Critical and reflective thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, concepts and events, before accepting or formulating a conclusion.	Issue/topic being considered critically is examined without clarification or description. Reflective thought is not provided.	Issue/topic being considered critically is stated but description leaves some aspects undefined, ambiguous, unexplored and boundaries undetermined.	Issue/topic being considered is critically stated, described, reviewed and examined so that understanding is not seriously impeded.	Issue/topic being considered is critically and thoughtfully stated and described comprehensively, delivering all relevant information necessary for full understanding.	

Comments:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

**Scoring Rubric for Overall Accomplishment**  
**Program Student Learning Outcomes #2 & 3**  
**STO 603, Research Methods**

University of Kentucky Online M.S. Program in Science Translation and Outreach (STO)  
in the College of Agriculture, Food and Environment

Student: \_\_\_\_\_

<b>Program Student Learning Outcome assessed</b>	<b>Criteria</b>	<b>Novice 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score<sup>1</sup></b>
2	Locate, identify and evaluate the credibility of relevant scientific information in agriculture, food and environment, and distinguish it from non-scientific information	Understands the appropriate role of credible scientific information when reviewing literature	Discriminates credible, evidence-based sources of scientific information from other sources	Identifies and interprets credible information and information sources relevant to research topics of concern relating to agriculture, food and environment	Appropriately uses professional judgement to independently synthesize credible scientific information for stakeholders	
3	Develop or select appropriate research methods and analyses to assess evidence-based outreach programs that focus on issues of	Understands the relationship between quantitative and qualitative research methods that help translate	Identifies the appropriate methods including measures, sample, sample size, and common	Deciphers appropriate research method and analysis that parsimoniously answer the research	Has the capacity to identify gaps in existing research, synthesize the need for additional research, specify research question(s), develop and propose a clear research project to stakeholders and communities	



	public concern in agriculture, food and environment	credible scientific information relevant to public concerns	analyses used in qualitative and quantitative research	question(s) and/or hypotheses		
--	---	---	--	-------------------------------	--	--

<sup>1</sup>Provide numerical score for each criterion or indicate if not applicable (NA)

Comments:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

**EXAMPLE OF ASSESSMENT OF SLO ASSESSMENT BASED ON MAJOR ASSIGNMENT**

**STO 603: Research Methods**

**Final Research Proposal Assignment Due: Week 16**

**Purpose:** To demonstrate competency in quantitative or qualitative research methods and scientific standards of written communication.

**Assignment:** Design a research study and write a research proposal suitable for a potential master’s thesis or similar-quality research study that includes (a) a literature review, (b) an introduction to the study including hypotheses, and (c) the method that will be used to conduct the study. Length should be 8–10 pages of text, not including cover page, references, etc., and formatting must be consistent with the APA Publication Manual (6th ed.).

**Grading Criteria**

<b>Component</b>	<b>Superior (9-10)</b>	<b>Excellent (7-8)</b>	<b>Good (5-6)</b>	<b>Fair (3-4)</b>	<b>Poor (1-2)</b>
<b>Literature review</b>	Literature review provides a thorough and balanced overview of relevant high-quality research, but also goes beyond the mere reporting of previous research by integrating results across studies to form original scholarship that is grounded in and logically emerges from the extant literature.	Approaches superior description but falls somewhat short of that standard in one or more ways.	A genuine attempt to meet the superior description is clear and successful on some level, but the outcome still falls well short of that standard in multiple ways.	Borders on poor description but occasionally exhibits a modicum of effort worthy of recognition yet still well below expectations.	Literature review reads like an annotated bibliography that merely regurgitates information already readily accessible in the literature with little integration across studies, relies on research of dubious quality, or omits substantial relevant content.
<b>Purpose statement, hypotheses, research questions (PSHRQ)</b>	PSHRQ are clearly stated, fit well together and within the larger proposal, are supported by the literature review, and are positioned appropriately (purpose early, Hs and/or RQs prior to Method section)	Approaches superior description but falls somewhat short of that standard in one or more ways.	A genuine attempt to meet the superior description is clear and successful on some level, but the outcome still falls well short of that standard in multiple ways.	Borders on poor description but occasionally exhibits a modicum of effort worthy of recognition yet still well below expectations.	PSHRQ are missing, unclear, incomplete, or illogical; do not fit well together or within the larger proposal, are not supported by the literature review, and are not positioned appropriately within the proposal.
<b>Method</b>	Includes a full and clear description of all required components of a Method	Approaches superior description but falls somewhat short of that	A genuine attempt to meet the superior description is clear and	Borders on poor description but occasionally exhibits a	Missing, unclear, incomplete, or illogical components within the

	<p>section according to APA and the needs of the proposed study (e.g., research design, sampling approach, sample description, measures, participant procedures, analytical procedures). The study description is sufficiently clear, detailed, and complete for a reader to replicate the study.</p>	<p>standard in one or more ways.</p>	<p>successful on some level, but the outcome still falls well short of that standard in multiple ways.</p>	<p>modicum of effort worthy of recognition yet still well below expectations.</p>	<p>Method section. Various components of the Method section do not fit well together, are ill-advised for the proposed study, or raise unaddressed ethical issues. Readers would have difficulty replicating the study based on the description provided.</p>
<p><b>Clarity and quality of writing</b></p>	<p>The organization and flow of ideas are easy to follow and transition phrases are used to lead the reader's attention from one idea or paragraph to another. Content within sections and paragraphs is consistent with headings and topic sentences, which are used to effectively structure the paper and guide readers. Sentences and paragraphs are sophisticated yet clear and succinct. A clear thesis or purpose statement can be found early in the paper. Each key point is clearly developed and discussed with logical reasoning and supporting evidence. Appropriate introductions, summaries, and conclusions are provided for the paper as a whole, as well as for distinct subsections within the paper.</p>	<p>Approaches superior description but falls somewhat short of that standard in one or more ways.</p>	<p>A genuine attempt to meet the superior description is clear and successful on some level, but the outcome still falls well short of that standard in multiple ways.</p>	<p>Borders on poor description but occasionally exhibits a modicum of effort worthy of recognition yet still well below expectations.</p>	<p>Organization is difficult to follow, unnecessary redundancy, transitions are rough, sentences and arguments are vague or ambiguous, multiple grammatical and mechanical errors, thesis or purpose statement is missing or not directly relevant to content of paper, key points are underdeveloped, missing or inadequate introductions or conclusions.</p>

<b>APA format</b>	APA format is fully and appropriately applied throughout the paper, from title page to reference list, including but not limited to page headers, section headings, in-text citations, and APA-specific grammar and punctuation rules.	Approaches superior description but falls somewhat short of that standard in one or more ways.	A genuine attempt to meet the superior description is clear and successful on some level, but the outcome still falls well short of that standard in multiple ways.	Borders on poor description but occasionally exhibits a modicum of effort worthy of recognition yet still well below expectations.	Multiple violations of APA format that demonstrate a lack of attention to detail or ignorance of APA rules and guidelines.
-------------------	--	--	---	--	--

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

**Scoring Rubric for Overall Accomplishment**

**Program Student Learning Outcomes #1,2,3**

**STO 650, Capstone in Science Translation and Outreach**

University of Kentucky Online M.S. Program in Science Translation and Outreach (STO)  
in the College of Agriculture, Food and Environment

Student: \_\_\_\_\_

<b>Program Student Learning Outcome assessed</b>	<b>Criteria</b>	<b>Novice 1</b>	<b>Developing 2</b>	<b>Accomplished 3</b>	<b>Exemplary 4</b>	<b>Score<sup>1</sup></b>
1	Engage with diverse audiences and explore information sources to ascertain issues of concern relating to agriculture, food and environment and their transdisciplinary relationships	Understands the importance of engaging the public issues in agriculture, food and environment	Can identify stakeholders and other sources capable of articulating significant public concerns	Demonstrates capability to work collaboratively with diverse stakeholders to identify and articulate complex issues of public concern	Is capable of leading diverse stakeholders in identifying topics of public concern as well as their transdisciplinary relationships/interconnections	
2	Locate, identify and evaluate the credibility of relevant scientific information in	Understands the appropriate role of credible scientific information in	Discriminates credible, evidence-based sources of scientific	Identifies and interprets credible information and information sources relevant to public	Appropriately uses professional judgement to independently synthesize credible scientific information for stakeholders	

	agriculture, food and environment, and distinguish it from non-scientific information	addressing public concerns	information from other sources	issues of concern relating to agriculture, food and environment		
3	Develop and assess evidence-based outreach programs that focus on issues of public concern in agriculture, food and environment	Understands the importance of translating credible scientific information that is relevant to public concerns	Translates relevant science to a form understood by stakeholder. Identifies needs for relevant applied research	One or more applies: Documents public progress in addressing issue of concern. Collaborates on applied research relevant to expressed public issues.	One or more applies: Documents measurable impact addressing the issue of concern. Delivers a well-received talk on the project at a professional conference. Leads a relevant applied research project	

<sup>1</sup>Provide numerical score for each criterion or indicate if not applicable (NA)

Comments:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_

**EXAMPLE FOR PROGRAM ASSESSMENT OF ELECTIVE COURSES**

**Common Scoring Rubric for Written or Oral Assignments in Elective Courses**

University of Kentucky Online M.S. Program in Science Translation and Outreach (STO)  
in the College of Agriculture, Food and Environment

Student: \_\_\_\_\_

Relevant to Program SLO(s) indicated	Criteria (if applicable)	Unacceptable performance (0)	Acceptable Performance (1)	Successful Performance (2)	Distinguished Performance (3)	Score <sup>1</sup>
1	Communication	Demonstrates ineffective oral and/or written communication. (e.g., uses improper grammar or slang)	Selectively demonstrates effective oral and/or written communication	Demonstrates effective oral and/or written communication skills	Demonstrates professional-level communication throughout	
1,2,3	Accuracy	Consistently inaccurate use of disciplinary knowledge	Notably inaccurate use of some disciplinary knowledge	Accurate use of disciplinary knowledge in almost all instances	Consistently accurate use of disciplinary knowledge	
1,2,3	Analysis	The component parts identified are not correct and/or relevant. The connections between parts are completely inaccurate	The work breaks the issue or problem into parts, but some parts may be missing or unclear. The connections between parts are somewhat accurate	The work presents the relevant parts of the issue or problem. Connections between parts are fairly recognizable	The work successfully breaks the issue or problem into relevant parts. The connections between parts are clear and highly accurate.	

2	Evaluates evidence	Fails to identify information that constitutes evidence relevant to the subject matter	Successfully identifies information that counts as evidence but fails to thoroughly evaluate its credibility	Identifies all relevant evidence and evaluates it	Identifies and rigorously evaluates all important evidence; provides new information for consideration	
1,2,3	Cross-disciplinary connections	No or inaccurate connections made between course subject matter and other disciplines	Few but accurate connections between course subject matter and other disciplines	Identifies connections between course subject matter and other disciplines	Draws numerous insightful connections between the course subject matter and other disciplines	
1,2,3	Self-reflection	No consideration of strengths and weaknesses of the work	Offers limited or somewhat inaccurate discussion of strengths and weaknesses	Presents strengths and weaknesses of the work	Clear and concise presentation of strengths and weaknesses of the work	

<sup>1</sup>Provide numerical score for each criterion or indicate if not applicable (NA)

Comments:

Evaluator: \_\_\_\_\_

Date: \_\_\_\_\_



**Collaborating or Affected CAFE Units (item 10b, Senate Form for New M.S. Programs)**

<b>Reviewing Unit</b>	<b>Unit representative</b>	<b>Expression of support</b>
Agricultural Economics (AEC)	Barry J. Barnett, Chair	18 Dec 2018
Animal and Food Science (AFS)	Richard Coffey, Chair	3 Dec 2018
Biosystems and Agricultural Engineering (BAE)	Mike Montross, Chair	5 Dec 2018
Community and Leadership Development (CLD)	Wes Harrison, Chair	19 Nov 2018
Entomology (ENT)	Subba Reddy Palli, Chair	4 Dec 2018
Family Sciences (FAM)	Ronald Werner-Wilson, Chair	12 Dec 2018
Forest and Natural Resource Science (FOR)	Jeffrey W. Stringer, Chair	26 Nov 2018
Horticulture	Mark Williams, Chair	3 Jan 2019
Nutrition and Food Systems (DHN)	Janet Mullins, Interim Chair	29 Nov 2018
Plant and Soil Sciences (PLS)	Rebecca McCulley, Chair	3 Dec 2018
Plant Pathology (PPA)	Chris Schardl, Chair	4 Dec 2018
Retailing and Tourism Management (RTM)	Vanessa Jackson, Chair	20 Nov 2018

## Vincelli, Paul

---

**From:** Kelly, Thomas  
**Sent:** Wednesday, November 7, 2018 1:24 PM  
**To:** Vincelli, Paul; Grabau, Larry  
**Cc:** King, Victoria; Knudsen, Hannah  
**Subject:** Re: Proposal for new online graduate program

Thank you Paul - our DGS, Dr. Knudsen, is OK with option #1, so I don't anticipate there would be any concerns if you decide to go in that direction.

Thank you for the opportunity to provide input.

Best,

Tom K.

---

**From:** "Vincelli, Paul" <paul.vincelli@uky.edu>  
**Date:** Wednesday, November 7, 2018 at 8:34 AM  
**To:** "Kelly, Thomas" <thkelly@uky.edu>, "Grabau, Larry" <larry.grabau@uky.edu>  
**Cc:** Victoria King <vlking00@uky.edu>, "Knudsen, Hannah" <hkknud2@uky.edu>  
**Subject:** RE: Proposal for new online graduate program

Dear Dr. Knudsen and Dr. Kelly:

Please excuse the delay in contacting you regarding the content below. Dr. Kelly, as our program planning progresses, it would be wonderful to compare notes and brainstorm over possible collaborative opportunities. Thank you for the suggestion.

With respect to the name of our proposed online M.S. program, I offered two possibilities:

1. Science Translation and Outreach
2. Science Translation and Outreach in Agriculture, Food and Environment

As you note, Dr. Kelly, #2 minimizes confusion between the two programs, and I personally like its clarity. The planning committee discussed these options and expressed a strong preference (as per a vote) for #1, for its simplicity and the very crowded appearance #2 would have on students' diplomas.

If we were to move forward with #1, would that create significant concerns for you? I will note that we use the phrase "Agriculture, Food and Environment" liberally in many documents. See, for example the title of our assessment document (attached), as well as the program student learning outcomes (also in the attached). You will see that we are very committed to avoiding unnecessary confusion between the two programs.

I look forward to your response.

With respect,  
Paul Vincelli

---

**Paul Vincelli**  
Extension Professor and Provost's Distinguished Service Professor  
UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)  
Member, Public Policy Board, American Phytopathological Society

---

**From:** Kelly, Thomas  
**Sent:** Thursday, October 25, 2018 3:46 PM  
**To:** Vincelli, Paul <paul.vincelli@uky.edu>; Grabau, Larry <larry.grabau@uky.edu>  
**Cc:** King, Victoria <vlking00@uky.edu>; Knudsen, Hannah <hkknud2@uky.edu>  
**Subject:** FW: Proposal for new online graduate program

Paul:

Thank you for your e-mail. We in the Center for Clinical & Translational Science agree with your assessment that while there are similar objectives in providing training in translational science, the focus of your program (Agriculture, Food and Environment) is distinct from our programs, which focus on health. My recommendation would be to use option 2 to minimize confusion between the programs. I am including Dr. Hannah Knudsen on this exchange, as Dr. Knudsen serves as the DGS for these programs, which are administratively housed in the Department of Behavioral Science. I suspect it will be important to request a response from her/the Department of Behavioral Science on these matters.

Good luck with the new program, and perhaps there will be collaborative opportunities between our programs in the future.

Best,

Tom Kelly  
Director, Training, Education and Mentoring  
Center for Clinical and Translational Science

---

**From:** CCTS <ccts@uky.edu>  
**Date:** Thursday, October 25, 2018 at 3:26 PM  
**To:** Victoria King <vlking00@uky.edu>, "Kelly, Thomas" <thkelly@uky.edu>  
**Subject:** FW: Proposal for new online graduate program

The person below is looking for a response.

---

**From:** Vincelli, Paul  
**Sent:** Thursday, October 25, 2018 6:00 AM  
**To:** CCTS <ccts@uky.edu>  
**Cc:** Grabau, Larry <larry.grabau@uky.edu>; Vincelli, Paul <paul.vincelli@uky.edu>  
**Subject:** RE: Proposal for new online graduate program

Hello, folks at the UK Center for Clinical and Translational Science:

Below is a duplicate email requesting your thoughts with respect to our new online M.S. program. We are nearing the point where we must submit a program name. The following two are being discussed by our committee. Could you provide your thoughts with respect to whether either of these conflict with your center's name? Or please forward this email to whomever must be able to provide a response on behalf of your program?

1. Science Translation and Outreach
2. Science Translation and Outreach in Agriculture, Food and Environment

Thanks in advance.

With respect,  
Paul Vincelli

---

**Paul Vincelli**  
**Extension Professor and Provost's Distinguished Service Professor**  
**UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)**  
**Member, Public Policy Board, American Phytopathological Society**

---

**From:** Vincelli, Paul  
**Sent:** Saturday, October 6, 2018 7:34 AM  
**To:** CCTS <[ccts@uky.edu](mailto:ccts@uky.edu)>  
**Cc:** Grabau, Larry <[larry.grabau@uky.edu](mailto:larry.grabau@uky.edu)>; 'pvincell@uky.edu' <[pvincell@uky.edu](mailto:pvincell@uky.edu)>  
**Subject:** Proposal for new online graduate program

To the Director of Graduate Programs  
UK Center for Clinical and Translational Science

I am leading the development of a new online Masters of Science program, with the working name, M.S. in Science Translation and Outreach (STO) in the College of Food, Agriculture and Environment. Please note the three attachments.

Before completing our submission proposing this new program, the committee must distinguish the proposed program from other UK graduate programs that potentially could have—or may be perceived as having—academic overlap.

We have identified the programs affiliated with the UK Center for Clinical and Translational Science as such programs. The mission of the UK Center for Clinical and Translational Science (<https://www.ccts.uky.edu/about-ccts>) includes science translation, as does the STO program. However, the central mission of the Center is focused on “critical health issues,” whereas the STO program will focus on issues of agriculture, food, and environment. In fact, we commonly and explicitly refer to the program as, Science Translation and Outreach in the College of Agriculture, Food and Environment, in order to identify it clearly with our college and to clearly distinguish it from other programs. We also note that “science translation” is a phrase shared by numerous, diverse disciplines. Indeed, the 104-year history of Cooperative Extension is of providing science translation to the public.

Therefore, we perceive no significant overlap nor conflict between the Center’s programs and the STO program. However, we seek your evaluation before proceeding further.

If you agree that there is no meaningful overlap, a short email expressing your judgment is all we require. If, however, you have concerns, please contact me to set up a phone call or a visit to your office.

Thank you for your consideration and time.

With respect,  
Paul Vincelli

---

**Paul Vincelli**  
**Extension Professor and Provost's Distinguished Service Professor**  
**UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)**  
**Member, Public Policy Board, American Phytopathological Society**

Department of Plant Pathology

College of Agriculture, Food and Environment  
University of Kentucky  
[pvincell@uky.edu](mailto:pvincell@uky.edu)  
Phone 859-218-0722  
Website: <http://plantpathology.ca.uky.edu/person/paul-vincelli>  
Twitter: [@pvincell](https://twitter.com/pvincell)

**From:** [Zimmer, Ronald](#)  
**To:** [Vincelli, Paul](#)  
**Cc:** [Grabau, Larry](#)  
**Subject:** RE: Proposal for new online graduate program  
**Date:** Tuesday, October 16, 2018 11:04:16 AM  
**Attachments:** [Support Letter.pdf](#)

---

Hi Paul,

I have an enclosed letter of support. If you need something different, let us know.

Ron

---

**From:** Vincelli, Paul  
**Sent:** Saturday, October 06, 2018 6:55 AM  
**To:** Zimmer, Ronald <ron.zimmer@uky.edu>  
**Cc:** Grabau, Larry <larry.grabau@uky.edu>; Vincelli, Paul <paul.vincelli@uky.edu>  
**Subject:** Proposal for new online graduate program

Dr. Ron Zimmer  
Director and Professor  
Martin School of Public Policy and Administration  
Patterson Office Tower 423

Dear Dr. Zimmer:

I am leading the development of a new online Masters of Science program, with the working name, M.S. in Science Translation and Outreach (STO) in the College of Food, Agriculture and Environment. Please note the three attachments.

Before completing our submission proposing this new program, the committee must distinguish the proposed program from other UK graduate programs that potentially could have—or may be perceived as having—academic overlap.

We have identified the Masters of Public Administration offered by the Martin School of Public Policy and Administration as one such program (<http://martin.uky.edu/mpa>). In our own analysis, we concluded that the MPA is public-service oriented, as is the STO program, but that the focus of the MPA is implementation of public policy. This is not a student learning objective of the STO program. Therefore, we perceive no overlap nor conflict between the MPA and the STO programs. However, we seek your evaluation before proceeding further.

If you agree that there is no meaningful overlap, a short email expressing your judgment is all we require. If, however, you have concerns, please contact me to set up a phone call or a visit to your office.

Thank you for your consideration and time.

With respect,  
Paul Vincelli

---

**Paul Vincelli**

**Extension Professor and Provost's Distinguished Service Professor  
UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)  
Member, Public Policy Board, American Phytopathological Society**

**Department of Plant Pathology  
College of Agriculture, Food and Environment  
University of Kentucky  
[pvincell@uky.edu](mailto:pvincell@uky.edu)  
Phone 859-218-0722  
Website: <http://plantpathology.ca.uky.edu/person/paul-vincelli>  
Twitter: [@pvincell](https://twitter.com/pvincell)**

C: Professor Larry Grabau  
Associate Dean for Instruction  
College of Food, Agriculture and Environment



October 16, 2018

To Whom It May Concern:

This letter is in support of the proposed new online Masters in Science Translation and Outreach (STO) in the College of Food, Agriculture and Environment. Based on the proposed curriculum, the program should provide new and important opportunities for students and we encourage approval of the program. Please feel free to call me at 859-323-5413 or email me at [ron.zimmer@uky.edu](mailto:ron.zimmer@uky.edu) if you have any questions.

Sincerely,

Ron Zimmer

Director of Martin School of Public Policy and Administration





**University of Kentucky**  
**College of Agriculture, Food and Environment**  
Department of Agricultural Economics  
400 Charles E. Barnhart Bldg.  
Lexington, KY 40546  
P: 859-257-5762  
F: 859-323-1913  
[www.uky.edu](http://www.uky.edu)

December 8, 2018

MEMORANDUM

TO: Paul Vincelli, Extension Professor  
Department of Plant Pathology

FROM: Barry Barnett, Chair  
Department of Agricultural Economics

RE: Department of Agricultural Economics Support for STO Program

This memorandum is to convey that at our Departmental faculty meeting of December 7, 2018, the Department of Agricultural Economics faculty voted unanimously in support of the following motion.

The Department of Agricultural Economics supports the development of a College of Agriculture, Food and Environment Master of Science Program in Science Translation and Outreach (STO). The Department also supports the enrollment of STO students (space permitting) in any online Agricultural Economics graduate courses (for which the students have appropriate prerequisite coursework) as electives for the STO program.

Please let me know if you have any questions.

## Vincelli, Paul

---

**From:** Coffey, Richard  
**Sent:** Monday, December 3, 2018 1:22 PM  
**To:** Grabau, Larry; Vincelli, Paul  
**Subject:** Vote of Support for College's STO Online MS Program

Larry/Paul:

Based on your recent request, I asked the AFS faculty to vote via email to express their support (or lack of support) for the college's proposed STO online MS program. A substantial majority (86%) have expressed their support of this program. Based on their vote, AFS supports this important program.

*Richard D. Coffey*

Dr. Richard Coffey, Chair  
Department of Animal and Food Sciences  
College of Agriculture, Food and Environment  
University of Kentucky  
907 W.P. Garrigus Building  
Lexington, KY 40546-0215  
Phone: (859) 257-2686  
Fax: (859) 257-2534  
Email: [Richard.Coffey@uky.edu](mailto:Richard.Coffey@uky.edu)

## Vincelli, Paul

---

**From:** Harrison Jr., Robert  
**Sent:** Monday, November 19, 2018 3:53 PM  
**To:** Vincelli, Paul  
**Cc:** Grabau, Larry; Jones, Kenneth  
**Subject:** Approval of CLD 665 as a cross listed with STO 601

Paul:

Just thought I'd let you know that the CLD faculty voted to approve the cross listing of CLD 665 with STO 601. I've approved the proposal via curriculog.

Best, Wes

-----  
R. Wes Harrison  
Professor and Chair  
Dept. of Community and Leadership Development  
College of Agriculture, Food and Environment  
University of Kentucky  
Lexington KY

E-mail: wes.harrison@uky.edu  
Tel: 859-257-7586  
Fax:859-257-1164

Mailing Address:

R. Wes Harrison  
Community and Leadership Development  
509 Garrigus Bldg  
Lexington KY, 40546-0215

TO: Dr. Paul Vincelli

FROM: Michael Montross



DATE: December 5, 2018

SUBJECT: Support of online STO MS program

The Biosystems and Agricultural Engineering Department of would like to express support for the development and delivery of an online Science Translation and Outreach MS program. We believe this program would be a valuable option for professionals looking to further their education.

The faculty voted unanimously by email to support the program. As a Department, we envision offering elective courses for the program. We look forward to the continued development of the program.

Please contact me if you need additional information.

see blue.



## Vincelli, Paul

---

**From:** Palli, Subba  
**Sent:** Tuesday, December 4, 2018 9:20 AM  
**To:** Vincelli, Paul; Grabau, Larry  
**Subject:** RE: Support for STO

Hi Paul,

At our faculty meeting on November 26<sup>th</sup>, Entomology faculty unanimously approved a motion to support STO program.

Best Regards,  
Reddy

---

**From:** Vincelli, Paul <paul.vincelli@uky.edu>  
**Sent:** Tuesday, December 04, 2018 9:07 AM  
**To:** Grabau, Larry <larry.grabau@uky.edu>  
**Cc:** Palli, Subba <rpalli@uky.edu>  
**Subject:** Re: Support for STO

Reddy, I do recall this email. I must have misplaced it. My apologies.

This email will serve to go forward though the Senate may require a formal faculty vote with your email offered as a motion. Can you do that in a future faculty meeting so we have that at the ready?

Again, my apologies for misplacing your email.

Paul Vincelli via iPhone

On Dec 4, 2018, at 8:58 AM, Grabau, Larry <[larry.grabau@uky.edu](mailto:larry.grabau@uky.edu)> wrote:

Reddy—I have copied Paul so that he can provide further insight.

With respect, Larry G.

---

**From:** Palli, Subba <[rpalli@uky.edu](mailto:rpalli@uky.edu)>  
**Sent:** Tuesday, December 4, 2018 8:52 AM  
**To:** Grabau, Larry <[larry.grabau@uky.edu](mailto:larry.grabau@uky.edu)>  
**Subject:** FW: Support for STO

Good morning Larry,

I sent this support email to Paul on October 29<sup>th</sup>. Is this sufficient? Entomology Faculty expressed unanimous support for this program.

Best Regards,  
Reddy

---

**From:** Palli, Subba  
**Sent:** Monday, October 29, 2018 9:25 AM

**To:** Vincelli, Paul <[paul.vincelli@uky.edu](mailto:paul.vincelli@uky.edu)>

**Cc:** Grabau, Larry <[larry.grabau@uky.edu](mailto:larry.grabau@uky.edu)>; Rittschof, Clare <[clare.rittshof@uky.edu](mailto:clare.rittshof@uky.edu)>

**Subject:** Support for STO

Dear Dr. Vincelli,

I am writing to express my enthusiastic support for the online M.S. program in Science Translation and Outreach in the College of Agriculture, Food and Environment. Entomology faculty will be happy to assist in the implementation of this program including developing online courses such as 1. Forest Entomology (Rieske-Kinney), 2. Medical Entomology (Syed), 3. Agroecology (Gonthier), 4. Identification of pests and disease vectors (Dupuis), 5. Integrated Pest Management (Obrycki) and 6. Physiology and Toxicology of Insecticides (Palli) as needed by the program. We are proposing to add an online version of Entomology Plan B Masters program; some of the courses taught for this program could be listed as electives for STO.

Good luck in establishing this exciting program,

Best Regards,

Reddy

<image002.png>Subba Reddy Palli

*University Research Professor and Chair*

Department of Entomology

College of Agriculture, Food and Environment

S225 Ag. Science N. University of Kentucky

Lexington, KY 40546

*Phone: 859 257 4962 Fax: 859 323 1120*



**University of Kentucky**  
**College of Agriculture, Food,**  
**and Environment**

Family Sciences Department

Room # 315 Funkhouser  
Building

Lexington, KY 40506

P: 859-257-7750

F: 859-257-3212

[www.uky.edu](http://www.uky.edu)

# Memo

**To:** Larry Grabau  
Paul Vincelli

**From:** Ronald Jay Werner-Wilson  
Family Sciences Department Chair

**Date:** 12/12/18

**RE: Faculty Support for M.S. in Science Translation and Outreach (STO)**

---

On behalf of faculty in the Family Sciences Department, I am writing to express enthusiastic support for the proposed M.S. in Science Translation and Outreach (STO) program. Faculty reviewed materials provided by Dr. Vincelli and voted to unanimously support the program.



**Memorandum**

**To:** Larry Grabau, Associate Dean for Instruction

Paul Vincelli, Professor, and Academic Program Contact – proposed M.S. in Science Translation and Outreach (STO) program

**From:** Jeff Stringer, Chair, Department of Forestry and Natural Resources

**Subject:** support for M. S. in Science Translation and Outreach (STO) program

**Date:** 11/26/2018

This memorandum provides information on both interest in, and support for, the proposed Master of Science in Science Translation and Outreach (STO) program. The Department of Forestry and Natural Resource faculty voted unanimously, in our October meeting, in support of the STO program. We believe and agree with the programs principals and that the STO program addresses a current need in our state. Further, we believe that there may be opportunities for FNR faculty and staff to provide elective courses for the program.

Several of our Extension faculty and associates see opportunities to provide online courses in their focus areas, including youth education and wildlife/human interactions. They believe the subjects would fit into the STO curriculum and be of benefit and interest to STO students. These courses would also help our Extension effort and interactions with agents and other agriculture educators. If the project is funded our faculty/staff would necessarily require discussions with the projects principals before commitments could be finalized.



**UNIVERSITY  
OF KENTUCKY**

**College of Agriculture, Food and  
Environment**

---

*Mark A. Williams, Ph.D.,  
Professor and Interim Chair  
DEPARTMENT OF HORTICULTURE  
N-318-F Agricultural Science Building-North  
Lexington, Kentucky 40546-0091  
Office: (859) 257-1758 Fax: (859) 257-2859  
e-mail: mark.williams@uky.edu*

January 3, 2019

Dr. Paul Vincelli  
UK Extension Professor and Provost's Distinguished Service Professor  
UK Coordinator, Sustainable Agriculture Research and Education Program (SARE)  
Member, Public Policy Board, American Phytopathological Society

Dear Dr. Vincelli,

This letter is intended to express the support of the Department of Horticulture for development of a College of Agriculture, Food and Environment Master of Science Program in Science Translation and Outreach (STO). A vote was taken via email by all faculty members of our department on December 11<sup>th</sup>, and there was unanimous support for the program. Our department is therefore supportive of enrollment (space permitting) of STO students in future online Horticulture graduate courses (space permitting and assuming adequate academic background), which could serve as electives for STO students.

Based on my interactions with Extension Agents and Stakeholders around our state, the development of this program is highly justified, and our department would be glad to contribute however we are needed. I fully expect the STO program to be successful and impactful at multiple levels. Thanks for your efforts.

Sincerely,

A handwritten signature in cursive script that reads "Mark Williams".

Mark Williams

## Vincelli, Paul

---

**From:** Mullins, Janet  
**Sent:** Thursday, November 29, 2018 1:02 PM  
**To:** Vincelli, Paul  
**Cc:** Grabau, Larry  
**Subject:** RE: Formal Letters of Support, Online Science Translation and Outreach MS program

Paul,

Our faculty voted unanimously (11 faculty members) today to endorse the STO online MS.

Please let me know if you need anything further from us.

Kind Regards - Janet



**Janet Tietyen Mullins, PhD, RDN**

Professor & Chair

University of Kentucky

Dietetics & Human Nutrition

203 Funkhouser Building

Lexington, KY 40506

859-218-2798

[janet.mullins@uky.edu](mailto:janet.mullins@uky.edu)

---

**From:** Grabau, Larry  
**Sent:** Monday, November 26, 2018 5:56 AM  
**To:** Barnett, Barry <Barry.Barnett@uky.edu>; Coffey, Richard <rcoffey@uky.edu>; Montross, Michael <michael.montross@uky.edu>; Harrison Jr., Robert <wes.harrison@uky.edu>; Palli, Subba <rpalli@uky.edu>; Werner-Wilson, Ronald <ronald.werner-wilson@uky.edu>; Stringer, Jeffrey <jeffrey.stringer@uky.edu>; Mullins, Janet <janet.mullins@uky.edu>; McCulley, Rebecca <rebecca.mcculley@uky.edu>; Schardl, Christopher <chris.schardl@uky.edu>; Jackson, Vanessa <vanessa.jackson@uky.edu>; Horohov, David <dwhoro2@uky.edu>; Young, Jeffery <jeffery.young@uky.edu>; Palmer, Gary <gpalmer@uky.edu>  
**Cc:** Vincelli, Paul <paul.vincelli@uky.edu>; Hunter, Jennifer <jhunter@uky.edu>; Mains, Mark <mmains@uky.edu>; Dillon, Carl <carl.dillon@uky.edu>; Brown, Roger <rogerbrown@uky.edu>  
**Subject:** Formal Letters of Support, Online Science Translation and Outreach MS program

Selected Department Chairs, CAFE—

The combined faculty leadership of the proposed Science and Translation Outreach MS, have asked me to reach out to you with a request for your endorsement of their proposal. Specifically, documentation of that endorsement would constitute a vote of your faculty (an e-mail vote is okay if that's okay with your faculty) along with your own support. This could be in the form of memorandum or an email; please address to Paul Vincelli, faculty director of this project (you may copy me if you wish). We would like to have your responses within one week, if at all possible (that is, by COB on December 3).

Just to review that current status of the program:

- This program should provide opportunities for extension staff to work toward an MS program no matter where they live in Kentucky.
- The faculty anticipate some level of interest from beyond Kentucky's borders.
- Two embedded Graduate Certificates (in Family and Consumer Sciences and Positive Youth Development) are likely to create synergies for a number of interested FCS and 4-H agents (and other interested persons).
- Creation of elective courses in support of this online STO program is expected to create opportunities for your faculty to develop and deliver online courses in your graduate programs, conceivably resulting in expansion of graduate programs to your departments.
- The funding model is now firm, with the Dean's investment and the Provost's investment secure (the most recent iteration of the business plan is attached).
- Both the STO faculty and the College's Graduate Curriculum Committee have fully approved all three programs described above, along with 12 online courses which support them.
- This program proposal is in good shape to move through the approval channels for fall 2019 delivery.

**Once again, the STO faculty is asking for you to request the endorsement of your faculty, and to share those formal results with Paul Vincelli by COB on Monday, December 3, if at all possible.**

By the way, my next message will include the "boatload" of materials about the programs and courses, should any of you or your faculty wish to examine those details.

With respect, Larry G.

C: STO Leadership Team

## Larry Grabau

Associate Dean for Instruction

E: [larry.grabau@uky.edu](mailto:larry.grabau@uky.edu) T: 859-257-3469

W: [www.uky.edu/grow](http://www.uky.edu/grow) F: 859-257-5212

O: N6 Agricultural Science Center

S: 1100 South Limestone Lexington, KY 40546-0091

---

University of Kentucky College of Agriculture, Food and Environment  
Center for Student Success

## Vincelli, Paul

---

**From:** Schardl, Christopher  
**Sent:** Tuesday, December 4, 2018 11:58 AM  
**To:** Vincelli, Paul  
**Subject:** Plant Pathology support for the proposed online M.S. in Science Translation and Outreach (STO)

**Importance:** High

Dear Paul

The faculty of Plant Pathology met yesterday and voted unanimously in support of the proposed online M.S. in Science Translation and Outreach (STO), and also in support of enrollment (space permitting) of STO students in online graduate PPA courses, which could serve as electives for the STO program. Examples of elective options from the PPA Department are listed below. Others may be created by our faculty in the future.

### Online Elective Options for STO Students

- PPA 620 3 cr Fungicides, Advanced Concepts
- PPA 630 1 cr Introduction to Genetically Engineered Crops, Risks and Benefits I
- PPA 631 1 cr Introduction to Genetically Engineered Crops, Risks and Benefits II

Best regards,  
Chris

Christopher L. Schardl, chair  
Department of Plant Pathology  
201F Plant Sciences Bldg.  
1405 Veterans Drive ph:1-859-218-0730  
University of Kentucky fx:1-859-323-1961  
Lexington, KY 40546-0312 SCHARDL@UKY.EDU  
<http://www.ca.uky.edu/agcollege/plantpathology/index.html>  
<http://www.endophyte.uky.edu/>

## Vincelli, Paul

---

**From:** McCulley, Rebecca  
**Sent:** Monday, December 3, 2018 9:42 AM  
**To:** Grabau, Larry; Vincelli, Paul  
**Subject:** RE: Formal Letters of Support, Online Science Translation and Outreach MS program

Hello You Two –

I polled my faculty, asking them to respond 'yes' or 'no' as to whether they support the proposed STO MS program. The email vote request went out last Monday (Nov 26), and they had until now to get back to me. Out of the 42 active faculty members included on the email, 13 responded and all responses were 'yes'. I received zero 'no' votes. So ~30% voter turnout – not fantastic, but it is difficult to get them to engage via email.

I think if any of my faculty were strongly opposed I would have heard it. Since I did not, I think you have the support of PSS faculty. Let me know if you need more.

Rebecca

---

**From:** Grabau, Larry  
**Sent:** Monday, November 26, 2018 5:56 AM  
**To:** Barnett, Barry <Barry.Barnett@uky.edu>; Coffey, Richard <rcoffey@uky.edu>; Montross, Michael <michael.montross@uky.edu>; Harrison Jr., Robert <wes.harrison@uky.edu>; Palli, Subba <rpalli@uky.edu>; Werner-Wilson, Ronald <ronald.werner-wilson@uky.edu>; Stringer, Jeffrey <jeffrey.stringer@uky.edu>; Mullins, Janet <janet.mullins@uky.edu>; McCulley, Rebecca <rebecca.mcculley@uky.edu>; Schardl, Christopher <chris.schardl@uky.edu>; Jackson, Vanessa <vanessa.jackson@uky.edu>; Horohov, David <dwhoro2@uky.edu>; Young, Jeffery <jeffery.young@uky.edu>; Palmer, Gary <gpalmer@uky.edu>  
**Cc:** Vincelli, Paul <paul.vincelli@uky.edu>; Hunter, Jennifer <jhunter@uky.edu>; Mains, Mark <mmains@uky.edu>; Dillon, Carl <carl.dillon@uky.edu>; Brown, Roger <rogerbrown@uky.edu>  
**Subject:** Formal Letters of Support, Online Science Translation and Outreach MS program

Selected Department Chairs, CAFE—

The combined faculty leadership of the proposed Science and Translation Outreach MS, have asked me to reach out to you with a request for your endorsement of their proposal. Specifically, documentation of that endorsement would constitute a vote of your faculty (an e-mail vote is okay if that's okay with your faculty) along with your own support. This could be in the form of memorandum or an email; please address to Paul Vincelli, faculty director of this project (you may copy me if you wish). We would like to have your responses within one week, if at all possible (that is, by COB on December 3).

Just to review that current status of the program:

- This program should provide opportunities for extension staff to work toward an MS program no matter where they live in Kentucky.
- The faculty anticipate some level of interest from beyond Kentucky's borders.
- Two embedded Graduate Certificates (in Family and Consumer Sciences and Positive Youth Development) are likely to create synergies for a number of interested FCS and 4-H agents (and other interested persons).
- Creation of elective courses in support of this online STO program is expected to create opportunities for your faculty to develop and deliver online courses in your graduate programs, conceivably resulting in expansion of graduate programs to your departments.

- The funding model is now firm, with the Dean’s investment and the Provost’s investment secure (the most recent iteration of the business plan is attached).
- Both the STO faculty and the College’s Graduate Curriculum Committee have fully approved all three programs described above, along with 12 online courses which support them.
- This program proposal is in good shape to move through the approval channels for fall 2019 delivery.

**Once again, the STO faculty is asking for you to request the endorsement of your faculty, and to share those formal results with Paul Vincelli by COB on Monday, December 3, if at all possible.**

By the way, my next message will include the “boatload” of materials about the programs and courses, should any of you or your faculty wish to examine those details.

With respect, Larry G.

C: STO Leadership Team

## **Larry Grabau**

**Associate Dean for Instruction**

**E:** [larry.grabau@uky.edu](mailto:larry.grabau@uky.edu) **T:** 859-257-3469

**W:** [www.uky.edu/grow](http://www.uky.edu/grow) **F:** 859-257-5212

**O:** N6 Agricultural Science Center

**S:** 1100 South Limestone Lexington, KY 40546-0091

---

University of Kentucky College of Agriculture, Food and Environment  
*Center for Student Success*



College of Agriculture,  
Food and Environment  
Retailing and Tourism Management  
318 Erikson Hall  
Lexington, KY 40506-0050  
859 257-4917  
fax 859 257-1275  
www.uky.edu

November 30, 2018

Paul Vincelli  
Extension Professor and Provost's Distinguished Service Professor  
Department of Plant Pathology  
College of Agriculture, Food and Environment  
University of Kentucky  
[pvincell@uky.edu](mailto:pvincell@uky.edu)  
Phone 859-218-0722  
Website: <http://plantpathology.ca.uky.edu/person/paul-vincelli>  
Twitter: [@pvincell](https://twitter.com/pvincell)

Dr. Vincelli:

Our faculty in the Department of Retailing & Tourism Management voted by e-mail and unanimously approved (10 of 10) to endorse STO (Science Translation and Outreach) program and allow STO students to enroll in online graduate courses offered by our department, subject to our enrollment limits. These classes include:

HMT 570 Event Planning and Coordination (3 cr) Available online  
MAT 514 Retail Entrepreneurship (3 cr) Available online  
MAT 570 Electronic Retailing (E-Tailing) (3 cr) Available online  
RTM 772 Seminar in Retailing and Tourism Management (3 cr) Available online

I also endorse the new program and the enrollment of STO students in our online courses listed above.

Sincerely,

A handwritten signature in black ink that reads 'Vanessa P. Jackson'.

Vanessa P. Jackson, Professor  
Chair, Retailing & Tourism Management  
University of Kentucky  
317 Erikson Hall  
Lexington, KY 40506-0050





University of Kentucky  
College of Agriculture, Food and Environment

February 14, 2019

MEMORANDUM

TO: Senate Council

RE: Administrative Feasibility of Three New Online Programs from CAFE—A New Online MS in Science Translation and Outreach (STO) and Two New, Embedded Online Graduate Certificates (GC) in Family and Consumer Sciences (FCS) and Positive Youth Development (PYD)

FROM: Dean Nancy M. Cox, College of Agriculture, Food and Environment (CAFE)

The Science and Translation Outreach (STO) Faculty of Record have worked together since February of 2018 to build an online MS degree in STO as well as a pair of online graduate certificates (one in FCS, and another in PYD). Both of these online graduate certificates were conceptually developed as part of the process of development of the STO MS program; notably, the STO MS Faculty of Record was not only their engine of innovative initiative but also remains their basis of administrative support. In addition, CAFE has committed financial resources toward the start-up of the overall STO MS program and both component graduate certificates, as well as structural support in terms of staff and administrative support. The Center for Student Success has been selected as the appropriate home for these three interconnected programmatic initiatives, since they represent a college-wide activity, and such multidisciplinary programs are routinely and effectively managed in this office, under appropriate faculty oversight.

In these three cases, Paul Vincelli will serve as Director of Graduate Studies for the STO MS, Jennifer Hunter as the Faculty Director for the FCS GC, and Mark Mains as the Faculty Director for the PYD GC. Documents listing the overall STO Faculty of Record were provided with each of the three proposals.

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

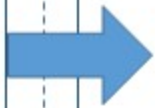
see blue.

UK administrative regulations, Senate rules, Graduate School rules

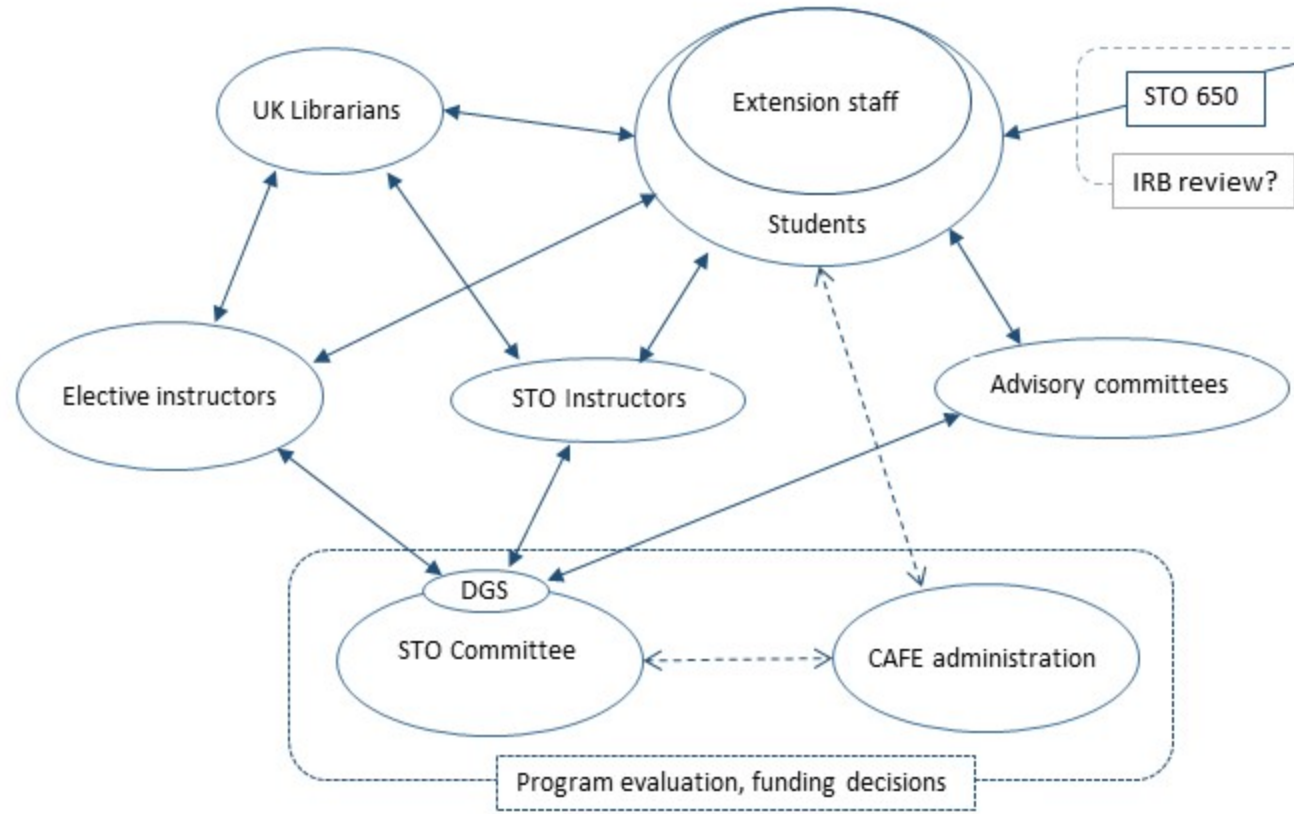
ENVIRONMENT  
Built  
Socioeconomic  
Biophysical

UK STO Program

**Resources**  
Qualified instructors  
Faculty advisors  
Administrative funding  
Tuition sharing  
Library resources  
Computing infrastructure  
Meeting space  
IT/pedagogical training



LOCAL SYSTEMS  
Civil society  
Private sector  
Government



LOCAL STAKEHOLDERS  
(people, organizations)

Public valuation?

**STO M.S. degrees awarded**

