

Brothers, Sheila

From: Cramer, Aaron
Sent: Tuesday, January 29, 2019 3:45 PM
To: Bird-Pollan, Jennifer; Brothers, Sheila
Cc: Jacobsen, Krista; Williams, Mark
Subject: NEW BS: Sustainable Agriculture and Community Food Systems
Attachments: SAG and CFS BS Proposal_final UK_17 Jan 2019.pdf

Proposed New BS in Sustainable Agriculture and Community Food Systems

This is a recommendation that the University Senate approve, for submission to the Board of Trustees, the establishment of a new BS degree: Sustainable Agriculture and Community Food Systems, in the College of Agriculture, Food and Environment.

Rationale: In 2007, UK joined other land-grant universities to develop sustainable-agriculture-oriented degree programs. Since that time, the number of degree programs in this area has nearly tripled. Over the last 10 years, the college has developed this program as an individualized undergraduate major, improving experiential teaching capacity and formalizing curriculum in two tracks: farming systems and community food systems. The proposed interdisciplinary, interdepartmental program focuses on three conceptual pillars: environmental stewardship, economic profitability, and social responsibility, with core courses integrating these at the introductory, intermediate, and capstone levels. Graduates of this program will be prepared for careers in farming, the nonprofit sector, cooperative extension, local government, and as on-farm conservation service providers. Initial program enrollment is estimated at 20 students, with growth anticipated to 40-50 students.

Aaron

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1. This form has two sections. Section A contains information required by the University Senate and Registrar’s office and Section B contains information required by two external entities, the CPE (Council on Postsecondary Education) and SACS-COC (Southern Association of Colleges and Schools Commission on Colleges). Although only Section A is required for University Senate approval, every question must be answered to receive CPE approval. Please write “not applicable” wherever that is the appropriate response, leaving no area blank.
2. 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 should be used for the CPE’s pre-proposal. Such questions are in both Section A and Section B. More information about the CPE’s [pre-proposal process](#) can be obtained by emailing OSPIE@l.uky.edu.
3. Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (HCCC and/or UC) 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 Senate for approval. Once approved by the Senate, the Senate Council office will send the proposal to the appropriate entities for it to be placed on an agenda for the Board of Trustees. The contact person listed on the form will be informed when the proposal has been sent to committee and other times as appropriate.

SECTION A – INFORMATION REQUIRED BY UNIVERSITY SENATE

1. Basic Information: Program Background and Overview

1a	Date of contact with the Director of Institutional Effectiveness (IE): (OSPIE@l.uky.edu)	11/7/2017
1b	Home College: <i>College Of Agriculture, Food, And Environment</i>	
1c	Home Educational Unit (school, department, college ¹): <i>College</i>	
1d*	Degree Type (BA, BS, etc.): <i>BS</i>	
1e*	Program Name (Interior Design, Social Work, etc.): <i>Sustainable Agriculture and Community Food Systems</i>	
1f*	CIP Code (provided by Institutional Effectiveness): <i>01.0308</i>	
1g	Is there a specialized accrediting agency related to this program?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	If “Yes,” name:	
1h*	Requested effective date: <input checked="" type="checkbox"/> Semester after approval. OR <input type="checkbox"/> Specific Date ² : _____	
1i	Anticipated date for granting first degree(s): <i>May 2020</i>	
1j*	Individual responsible for submission of, completion of, and answering questions about the proposal (“contact person”):	
	Name: <i>Krista Jacobsen</i>	Email: <i>krista.jacobsen@uky.edu</i> Phone: <i>257-3921</i>

2. Program Overview

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

² Programs are typically made effective for the semester following approval. No program will be made effective unless all approvals, up through and including Board of Trustees and CPE approval, are received.

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2a*	Provide a brief description of the proposed program. (300 word limit)
	<p><i>This interdisciplinary, interdepartmental program in the College of Agriculture, Food and Environment is grounded in the framework that integrates three conceptual “pillars”: environmental stewardship, economic profitability, and social responsibility. Sustainable Agriculture and Community Food Systems core courses are designed to integrate these perspectives at the introductory, intermediate, and capstone levels. The remainder of the curriculum leverages external courses within each of these "three pillars" of sustainability, in addition to UK Core and pre-major requirements. Specialty support credits are recommended along two tracks: 1) Farming Systems - for students seeking focus on sustainable production methods and biophysical systems; and 2) Community Food Systems - for students seeking focus on food systems issues beyond the "farm gate," including access, food security, and hunger issues. Experiential learning is emphasized throughout the program, through the coursework and faculty advising directing independent research (395-level) and EXP 399 credit, as well as Education Abroad offerings. Graduates of this BS program are prepared for careers in farming, the non-profit sector, Cooperative Extension, local government, on-farm conservation service providers, and graduate studies in their track area.</i></p>
2b	(similar to 11a) List the program objectives. These objectives should deal with how students will benefit from the program, both tangibly and intangibly. Give evidence that they will benefit. (300 word limit)
	<ul style="list-style-type: none"> - Provide students with fundamental knowledge, practical field experience, integrative skills and an understanding of agriculture and food systems in the broader society. - Prepare students for careers in production agriculture, allied industries, food and agriculture organizations at points beyond the "farm gate" in the value chain, and other public and private sector employment opportunities.. - Engage non-agricultural students through the Sustainable Agriculture Minor so that agriculture enjoys a broader societal support base. - Augment courses of study for students in other agriculture majors through the Sustainable Agriculture Minor. - Create within the Commonwealth an academically rigorous program that has the potential to enhance farm profitability, reduce the environmental impacts of agriculture, and strengthen the social connections between farmers and consumers.
2c*	List the student learning outcomes (SLOs) for the proposed program and include the SLO for the Graduation Composition and Communication Requirement (GCCR). (300 word limit) (More detailed information will be addressed in a subsequent question.)
	<ol style="list-style-type: none"> 1. Demonstrate an understanding of the economic profitability, social responsibility and environmental stewardship components of sustainable agriculture. 2. Explain how the concept of sustainability is applied and practiced in local and global food systems. 3. Evaluate the sustainability of a site-specific situation by applying an integrated, interdisciplinary understanding of sustainability in agriculture and food systems. 4. Examine and integrate his/her own understanding of agricultural sustainability through oral and written communication.
2d	Describe the rationale and motivation for the program. Give reference to national context, including equivalents in benchmark institutions. (150 word limit)
	<p><i>In 2007, UK joined Land Grant Universities (LGU's) across the country developing sustainable agriculture-oriented degree programs. At that time, only 5 LGU's offered BA/BS degrees in this area. Currently, there are 14 LGU's offering majors (Appendix A), and 11 minors. These programs are characterized by emphasis on the tri-partite nature of sustainability, experiential learning, and real-world problem solving.</i></p>

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	<p><i>Over the past 10 years, we have developed this program as an Individualized undergraduate major in CAFE. We have improved our experiential teaching capacity by building a robust teaching farm, cultivating interdepartmental and intercollegiate faculty engagement, graduating ~50 majors, and refining our curriculum in two tracks based on student input and career trajectories. "Formalizing" the major will provide opportunities to increase program visibility and recruitment resources to further our growth and development. The Individualized major in CAFE will not be offered upon creation of this new program.</i></p>	
2e	<p>Describe the proposed program's uniqueness within UK. (250 word limit)</p>	
	<p><i>The Sustainable Agriculture and Community Food Systems major is the singular program that integrates the production of food, fiber, and fuel in the broader fabric of the ecosystems, economies, and communities in which our agricultural systems is woven. This interdisciplinary program is unique within UK's sustainability-oriented programs due to the emphasis on agriculture and food systems; within environmental programs due to the emphasis on economic viability and cultural context; and within discipline-oriented majors with it's consideration of whole systems rather than components. More practically, the Program Core Courses represent a broad foundation in economic viability in farming and food enterprises, environmental responsibility within agricultural production systems, and social responsibility and food access that are not required in any other major. The program has unique experiential learning capacity, including our Community Supported Agriculture project on the Horticulture Research Farm, where students in the SAG 397 course produce organic vegetables and fruits for over 200 UK families. Service learning, community-based projects and field trips, and applied laboratories are emphasized throughout the SAG courses and all students are encouraged to conduct independent, applied research or experiential learning in their Specialty Support (Guided Electives) coursework.</i></p>	
2f	<p>Describe the target audience. (150 word limit)</p>	
	<p><i>The target audience are students interested in food production by optimizing economic, environmental and social goals for farms and communities. The curriculum is tailored for individual student interests, with emphasis areas on diversified farming systems, diversified marketing strategies to maximize value captured in farm products, and strengthening food production, distribution and access in local and regional food systems. In the pilot 10-year period as a "Individualized Curriculum" in CAFE, we have successfully graduated traditional, transfer, military veterans, and other non-traditional students into jobs and graduate schools in their field of study. We will continue to serve this diverse student audience. Further, we have seen strong interest in students seeking to double major in Sustainable Agriculture and Ag Ed, NRES, and Ag Econ (CAFE), and Environmental and Sustainability Studies (ENS, Arts and Sciences). We specifically wish to target out-of-state students through the Academic Common Market.</i></p>	
2g*	<p>Does the program allow for any tracks (a.k.a. options)?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>
	<p>If "Yes," name the track(s). (Specific course requirements will be described in a subsequent section.)</p>	
	<p>Track #1: <i>Farming Systems</i></p>	
	<p>Track #2: <i>Community Food Systems</i></p>	
	<p>Track #3:</p>	
	<p>Track #4:</p>	
	<p>Track #5:</p>	
	<p>Track #6:</p>	

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2h	Does the program <u>require</u> a minor?	Yes ³ <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If "Yes," what is the name of the minor?			
2i	Are necessary resources available for the proposed new program?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>(A more detailed answer is requested in Section A, part 4.)</i>			
2j	Describe how the proposed program will be administered, including admissions, student advising, retention, etc. <i>(150 word limit)</i>		
<p><i>The program will be administered by a Faculty of Record representing departments in which the students take courses, in the Colleges of Agriculture, Food and Environment and Arts and Sciences. The Faculty of Record will meet at least once per semester for programmatic updates and feedback on specific issues, and will be chaired by a Program Director. The Director of Undergraduate Studies will facilitate assessment, course and curriculum revisions and updates, and be responsible for coordinating reporting activities. Admissions will be coordinated through standard UK admissions procedures. Student advising will be conducted by affiliated faculty and, when needed, professional staff assigned to assist with advising and program recruitment. Recruitment is aided by a Program Recruiter shared (25% Sustainable Agriculture) with the Modern Agronomy Individualized Degree program. However, the majority of recruitment and retention efforts are conducted by individual faculty in the program teaching SAG courses.</i></p>			
2k	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. <i>(150 word limit)</i> <i>(Letters of support will be addressed in subsequent sections.)</i>			
<p><i>The Departments of Horticulture, Agricultural Economics, and Community and Leadership Development each permit their faculty to teach SAG courses and perform administrative functions for this interdisciplinary program. The program and budget are housed at the College level, with support from the CAFE Office of Student Success.</i></p>			
2l	List all UK programs ⁴ which the proposed program could be perceived as replicating. Give a rationale for why this is not duplication, or is a necessary duplication. <i>(250 word limit)</i>		
<p><i>Horticulture, Plant, and Soil Science (HPLS) - A major (BS) focused largely on plant production systems, with emphasis on a greater number of courses within the Plant and Soil Sciences. It does not specifically incorporate the tri-partite sustainability framework of the Sustainable Agriculture and Community Food Systems major, nor do students take courses in all of these areas.</i></p> <p><i>Natural Resources and Environmental Sciences (NRES) - A major (BS) focused on larger resource management issues, and does not include production agriculture specifically. Students wanting to add this area are advised by NRES advisors to incorporate SAG courses as a component of their Global Food Systems Environmental Systems Emphasis Area.</i></p> <p><i>Environmental and Sustainability Studies (ENS) - A major (BA) focused on humanities and social science students to obtain a basic understanding of natural and physical science content relevant to a broad range of environmental and sustainability topics. It does not focus on agriculture, community food systems, or agroecosystem management.</i></p>			

³ If "Yes," in conjunction with the submission of this form to the home unit, you must also fill out the form for a new minor and submit it to the home unit.

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

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2m	The faculty of record is the faculty body responsible for ALL aspects of the program, including courses, credit hours, rigor, changes to the program, etc. Please identify the program's <i>faculty of record</i> by choosing ONE of the four scenarios below. For more information on each faculty of record scenario, visit http://www.uky.edu/Faculty/Senate/Forms/UndegDegPgm_Help.html .		
	<input type="checkbox"/>	Scenario 1	
			OR
	<input type="checkbox"/>	Scenario 2	
			OR
	<input type="checkbox"/>	Scenario 3	
			OR
	<input checked="" type="checkbox"/>	Scenario 4	
	If Scenarios 2, 3, or 4 are chosen, please provide describe/list/name the members of the faculty of record and describe the voting rights of members of the faculty of record. Include the process and standards for identifying the program director, as well as adding and deleting members of the faculty of record. (150 word limit)		
	<i>Faculty from the Departments teaching required courses in the major, as well as representatives from interdisciplinary agriculture and sustainability majors serve on the Faculty of Record. The Faculty of Record will nominate and appoint membership and the Program Director annually, with membership documented by the CAFE Associate Dean for Instruction. Members of the Faculty or Record for the 2017-2018 academic year (currently called the Program Steering Committee) are detailed in Appendix B.</i>		
2n	Will the program have an advisory board ⁵ ?		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:	
		Total Number of Advisory Board Members	

3. Delivery Mode

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

⁶ For questions about alternative delivery modes, please contact UK's Distance Learning Programs and e-Learning office (URL above).

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3a*	Initially, will any portion of the proposed program’s core courses be offered via distance learning ⁷ ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	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 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 for assistance. <i>The prospectus is required by SACS, but it is NOT required for Senate review.</i>		
3b*	If <i>any</i> percentage of the program will be offered via the alternative learning formats below, check all that apply, below.		
	<input 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. <i>(200 word limit)</i>		
	<ul style="list-style-type: none"> • Synchronous and asynchronous components. • Balance between traditional and non-traditional aspects. • Hybrid elements. 		
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. <i>(150 word limit)</i>		
	If “Yes,” when will the faculty be appointed? <i>(150 word limit)</i>		
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. <i>(150 word limit)</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. <i>(150 word limit)</i>		
	<i>See Appendix C, Affected units and letters of support.</i>		

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

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<p>If “Yes,” append to the end of this form a letter of support from the appropriate educational unit chair/director from whose unit individual courses will be used. A letter must include the following:</p> <ul style="list-style-type: none">• Demonstration of true collaboration between multiple units⁸;• Impact on the course’s use on the home educational unit; and• Verification that the chair/director has consent from the faculty members of the unit.
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⁸ Show evidence of detailed collaborative consultation with such units early in the process.

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4d	<i>(similar to question 19)</i> Fill out the faculty roster below for full-time and part-time faculty teaching major core courses in the proposed program.		
<p align="center">NAME</p> <p align="center">List name & identify faculty member as FT (full-time) or PT (part-time).</p>	<p align="center">FACULTY CIP CODE⁹</p> <p align="center">List the applicable CIP Code for the faculty member.</p>	<p align="center">MAJOR CORE COURSES IN THE PROGRAM</p> <p align="center">List the major core courses in the program that the faculty member will teach.</p>	<p align="center">OTHER QUALIFICATIONS</p> <p align="center"><i>If applicable, list any other qualifications and comment on how they pertain to the courses in the program the faculty member will teach. If not applicable, mark with "n/a."</i></p>
<i>Krista Jacobsen (FT)</i>	<i>01.1103</i>	<i>SAG 210</i>	<i>An agroecologist who has taught SAG 210 (formerly SAG 101) for 9 years, current DUS of the Individualized program.</i>
<i>Karen Rignall (FT)</i>	<i>01.0899</i>	<i>SAG 210, 310</i>	<i>A food systems-oriented anthropologist who is currently teaching the SAG 310 course. She will co-teach SAG 210 with a natural scientist (Jacobsen), alternating with Tanaka.</i>
<i>Keiko Tanaka (FT)</i>	<i>01.0899</i>	<i>SAG 210, SAG 310</i>	<i>A rural sociologist with expertise in food systems, Tanaka developed SAG 310 (formerly SAG 201) as a UK Core course, has taught the course for 7 years, and oversees the GCCR component of the course.</i>
<i>Mark Williams (FT)</i>	<i>01.1103</i>	<i>SAG 397, SAG 490</i>	<i>The original DUS of the program who has developed the teaching farm and capstone courses associated with the program and directed assessment and reporting activities for nearly 10 years.</i>

⁹ Consult your college’s associate dean for faculty affairs for specific assistance with Classification of Instructional Programs codes (CIP codes).

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

5a	Referring to program objectives, student benefits, and the target audience (questions 2b and 2f), explain how the <i>program</i> will be assessed, which is different from assessing student learning outcomes. Include how the faculty of record will determine whether the program is a success or a failure. List the benchmarks, the assessment tools, and the plan of action if the program does not meet its objectives. <i>(250 word limit)</i>
	<i>Program-level reviews are conducted every 5 years, and recommendations incorporated into a Program Implementation Report that is reviewed and revised annually, reporting to the CAFE Assistant Dean of Administration. Additionally, graduates will be interviewed at an exit interview will be used to determine student satisfaction with the curriculum. Comments from students are collated, and where they coalesce into a common experience, are used as a guide to make course and program changes. These interviews will be conducted yearly with graduating seniors.</i>
5b	<i>(related to 2c and 14.c)</i> Based on the SLOs from question 2c, append a PDF of the program’s course map ¹⁰ to the end of this form. <i>(Click HERE for a sample curricular map.)</i>
5c	Append an assessment plan ¹¹ for the SLOs to the end of this form. <i>(Click HERE for a sample assessment plan.)</i>

6. Miscellaneous

6a	Is there anything else about the proposed program that should be mentioned? <i>(150 word limit)</i>
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7. Specific Course Requirements. [S, R]

UK Core Requirements			
		Course Prefix and Number	Number of Credit Hours
7a	I. Intellectual Inquiry (one course in each area)		
	Arts and Creativity	<i>Any course approved for UK Core requirement</i>	3
	Humanities	<i>Any course approved for UK Core requiremen</i>	3
	Social Sciences	<i>CLD 102 or SOC 101 (satisfies pre-major requirement)</i>	3
	Natural/Physical/Mathematical	<i>Any course approved for UK Core requirement</i>	3
7b	II. Composition and Communication		
	Composition and Communication I	CIS or WRD 110	3
	Composition and Communication II	CIS or WRD 110	3

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

¹¹ An assessment plan is typically a tabular grid that illustrates the artifacts, rubrics, assessment team, and periods of assessment for the SLOs.

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7c	III. Quantitative Reasoning (one course in each area)		
	Quantitative Foundations	<i>PHI 120 or MA 109</i>	3
	Statistical Inferential Reasoning	<i>STA 210 (satisfies pre-major requirement)</i>	3
7d	IV. Citizenship (one course in each area)		
	Community, Culture and Citizenship in the USA	<i>GEN 100 (satisfies College requirement)</i>	3
	Global Dynamics	<i>SAG 310</i>	3
7e	Total UK Core Hours:		27
7f	Graduation Composition and Communication Requirement (GCCR)		
7f.i	How will the GCCR be delivered in the proposed program? For each box checked, list the prefix and number for the relevant course(s), including any cross-listing(s).		
	<input type="checkbox"/> Single course within the program's home unit.		
	<input checked="" type="checkbox"/> Multiple courses within the program's home unit.		<i>SAG 310, SAG 490</i>
	<input type="checkbox"/> Single course from outside ¹² the program's home unit.		
	<input type="checkbox"/> Multiple courses from outside ¹¹ the program's home unit.		
	<input type="checkbox"/> Combination of course(s) from inside and outside ¹¹ the program's home unit.		
7f.ii	Course	Prefix & Number	Course Status ¹³
	Course #1	<i>SAG 310</i>	Existing (needs change)
	Course #2 (<input type="checkbox"/> Not applicable.)	<i>SAG 490</i>	Existing (needs change)
	Course #3 (<input checked="" type="checkbox"/> Not applicable.)		Select one....
	Course #4 (<input checked="" type="checkbox"/> Not applicable.)		Select one....
7f.iii	Provide a narrative regarding this program's GCCR, for inclusion in the Bulletin.		
7g	College-level Requirements		
	How will college-level requirements be satisfied?		
	<input type="checkbox"/> Standard University college requirement	List course(s):	
		<i>OR</i>	
	<input checked="" type="checkbox"/> Specific course(s)	List course(s): <i>GEN 100</i>	
<p><i>Use the grids below to list core courses, electives, courses for a track, etc. Use the course title from the Bulletin or from the most recent new/change course form.</i></p>			

¹² You must include a letter of support from the other unit. The letter must address delivery mechanisms and resources allocated for the specified GCCR course(s). Please convert the letter to a PDF and append to the end of this form.

¹³ Use the drop-down list to indicate if the course is an existing course that will not be changed, if the course is an existing course that will be changed, or if the course is a new course.

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7h* Program Major Core Courses. (Required for <u>all</u> students in the program and includes pre-major and pre-professional courses. Check the appropriate box to describe the course as either “program core” or “pre-major/pre-professional”.)				
Prefix & Number	Course Title	Type of Course	Credit Hrs	Course Status ¹³
<i>ECO 201</i>	<i>Principles of Economics I</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>CHE 104</i>	<i>Introductory General Chemistry</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>CHE 108</i>	<i>Intro to Inorganic, Organic, and Biochemistry</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>BIO 148</i>	<i>Principles of Biology I</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>BIO 152</i>	<i>Principles of Biology II</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>DHN 212</i>	<i>Introductory Nutrition</i>	<input type="checkbox"/> Pgm Core <input checked="" type="checkbox"/> Pre-major/prof	3	Existing
<i>ASC 382</i>	<i>Principles of Livestock Production</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>PLS 366</i>	<i>Fundamentals of Soil Science</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	4	Existing
<i>PLS 386</i>	<i>Plant Production Systems</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	4	Existing
<i>AEC 302</i>	<i>Agricultural Management Principles</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	4	Existing
<i>AEC 305</i>	<i>Food and Agricultural Marketing Principles</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>AEC 445G</i>	<i>Introduction to Resource and Environmental Economics</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>PHI 205</i>	<i>Food Ethics</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>SOC 360</i>	<i>Environmental Sociology</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>CLD 517</i>	<i>Rural Sociology</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing
<i>SAG 210</i>	<i>Introduction to Sustainable Agriculture and Community Food Systems</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing (needs change)
<i>SAG 310</i>	<i>Cultural Perspectives on Sustainability</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing (needs change)
<i>SAG 397</i>	<i>Apprenticeship in Sustainable Agriculture</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing

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SAG 490	<i>Integration of Sustainable Agriculture Principles</i>	<input checked="" type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof	3	Existing (needs change)
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
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		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
		<input type="checkbox"/> Pgm Core <input type="checkbox"/> Pre-major/prof		Select one....
Total Core Courses Credit Hours:			42	
7i	Is there any narrative about pre-major or pre-professional courses for the program that should be included in the Bulletin? If "Yes," note below. (150 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
7j	Is there any narrative about core courses for the program that should be included in the Bulletin? If "Yes," note below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	Program Guided Electives¹⁴ (Guided electives for <u>all</u> students in the program.)	<input type="checkbox"/> Not Applicable		
7k*	Does the program include any guided electives? (If "No," indicate & proceed to 7n.)	Yes <input checked="" type="checkbox"/>	No ¹⁵ <input type="checkbox"/>	
7l	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"/>	

¹⁴ Program 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.).

¹⁵ If "No," proceed to question 7n.

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7m*	Using the grid provided, list the guided electives below.		
Prefix & Number	Course Title	Credit Hrs	Course Status
	<i>See Appendix D, Program 4-Year Plan and Track Courses</i>		Select one....
			Select one....
			Select one....
			Select one....
			Select one....
			Select one....
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			Select one....
<i>Total Credit Hours as Guided Electives:</i>		9	

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7n*	Program Free Electives¹⁶. (Free electives for <u>all</u> students in the program, which includes general elective hours required by college and/or University (e.g. UK Core) for degree completion.)	<input type="checkbox"/> Not Applicable	
7o*	What is the total number of credit hours in free electives?	12	
7p	Provide a narrative, including course prefixes, about free electives courses that will be included in the Bulletin. (150 word limit) <i>Free electives may be chosen as needed to achieve at least 120 credit hours.</i>		
7q	Courses for a program’s track(s). Check the appropriate box to describe the course as either “a core course for the track” or “an elective course for the track.” (Click HERE for a template for additional tracks ¹⁷ .)	<input type="checkbox"/> Not Applicable	
Track name: <i>Farming Systems or Community Food Systems (See Appendix D).</i>			
Prefix & Number	Course Title	Credit Hrs	Course Status
	<i>All track courses are track electives.</i>	<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		<input type="checkbox"/> Track Core <input type="checkbox"/> Track Elective	Select one....
		Total Credit Hours Track:	12
7r	Is there any narrative about courses for a track that should be included in the Bulletin? If “Yes,” note below. (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

¹⁶ Program free electives are available to all students in the program and the choice of which course(s) to take is up to the student. The courses are not grouped and are sometimes described as “student must take three courses at the 400-level or above.”

¹⁷ Append a PDF with each track’s courses to the end of this form.

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Students must select one track in which they must take 12 hours of approved coursework, either in "Farming Systems" or "Community Food Systems." Students will then select 9 additional credits of guided elective courses at the 200-level or above, with approval of the student's academic advisor

7s	Total Credit Hours Required by Level. (below)				
	100-level: 27	200-level: 9	300-level: 33	400-level: 6	500-level:

7t What is the total number of credit hours required for the degree? (e.g. 120, 126) 120
 If an explanation about the total credit hours is necessary, use the space below. (150 word limit)

8. Degree Plan

8a Create a degree plan for the proposed program by listing in the table below the courses that a typical student would take each semester. If multiple tracks are available, click [HERE](#) for a template for additional tracks. Append a PDF with each track's semester-by-semester program of study to the end of this form.

YEAR 1 - FALL:	<i>See Appendix D.</i>	YEAR 1 - SPRING:	
YEAR 2 - FALL :		YEAR 2 - SPRING:	
YEAR 3 - FALL:		YEAR 3 - SPRING:	
YEAR 4 - FALL:		YEAR 4 - SPRING:	

8b 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)

9. Approvals/Reviews

Information below about the review process does not supersede the requirement for individual letters of support from educational unit administrators and from educational subunit administrators.

	Reviewing Group Name	Date Approved	Contact Person Name/Phone/Email
9a	(Within College)		
	<i>Sustainable Ag Program Steering Committee</i>	<i>3/20/2017</i>	<i>Mark Williams / 257-1758 / mark.williams@uky.edu</i>
	<i>Undergraduate Curriculum Committee, CAFE</i>	<i>1/26/2018</i>	<i>Larry J. Grabau / 257-3469 / lgrabau@uky.edu</i>
			/ /
			/ /
9b	(Collaborating and/or Affected Units)		
	<i>See Appendix C</i>		/ /
			/ /
			/ /
			/ /
			/ /

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			/	/
			/	/
			/	/
			/	/
9c	(Senate Academic Council)		Date Approved	Contact Person Name
	Undergraduate Council		<i>10/2/2018</i>	<i>Joanie Ett-Mims</i>
	Health Care Colleges Council (if applicable)			

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SECTION B – INFORMATION REQUIRED BY CPE AND SACS	
10. Program Overview – Program Quality and Student Success	
10a	<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>This multi-departmental program is distinctly interdisciplinary, experiential, and offers students interested in agricultural sustainability a holistic perspective on the topic, and the ability to specialize in areas of farming or community food systems. The program leverages the highly developed UK Organic Farming Unit at the Horticulture Research Farm. The Organic Farming Unit includes a 10-acre working farm that is already established and staffed, and has been hosting courses in this program for 11 years as an Individualized Program in the College of Agriculture, Food, and the Environment. Students in SAG 397 work along side staff to grow food for over 200 UK faculty, staff, and student families.</i></p> <p><i>It is notable that formalizing this major will offer the opportunity to recruit students from states without related majors at their state institutions through the Academic Common Market. At the time of this writing, only 14 Land Grant Universities (LGU's) nationwide offer Bachelor's degrees in this area, and only one of these LGU's (Clemson University) is in the Southeast (see Appendix A). Finally, the program builds upon national-level recognition of sustainable agriculture education through faculty and program involvement in the Sustainable Agriculture Education Association. The SAEA is the only professional organization dedicated to the teaching and learning of sustainable agriculture among adult (non K-12) students. It is notable that Dr. Williams was a founding member of this organization, and Dr. Jacobsen has served as a long-term member of the leadership council.</i></p>
10b*	<p>(similar to 2b) What are the intended student learning outcomes (SLOs) of the proposed program? Address one or more of the five areas of learning – broad, integrative knowledge; specialized knowledge; intellectual skills; applied learning; and civic learning. (300 word limit)</p> <ol style="list-style-type: none"> <i>1. Demonstrate an understanding of the economic profitability, social responsibility and environmental stewardship components of sustainable agriculture.</i> <i>2. Explain how the concept of sustainability is applied and practiced in local and global food systems.</i> <i>3. Evaluate the sustainability of a site-specific situation by applying an integrated, interdisciplinary understanding of sustainability in agriculture and food systems.</i> <i>4. Examine and integrate his/her own understanding of agricultural sustainability through oral and written communication.</i>
10c	<p>Clearly state the student admission, retention, and completion standards designed to encourage high quality. (300 words)</p> <p><i>Admission to the program will be open. Retention is encouraged by small course sizes in all SAG Core Courses (under 30 students), as well as course grading being heavily weighted towards participation and active student engagement. This encourages strong connections between students and program faculty, as well as cohort building among the students. Further, experiential learning courses (e.g. SAG 397 (required), SAG395 (optional), EXP 399 (optional)) are led by program faculty and individually-tailored to student academic and professional interests. High completion standards are maintained through programmatic emphasis on higher-level, integrative learning skills throughout the curriculum, emphasizing systems-level thinking and real-world issues analyses. Students are required to complete courses requiring a depth of coursework in the environmental, economic and social aspects of sustainability; SAG Core courses seek to integrate these perspectives into a holistic perspective. Retention and high quality completion standards are also reinforced by one-on-one faculty advising throughout the student's undergraduate degree program.</i></p>
10d	<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</p>

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	articulation agreements related to this proposed program to PDF and append to the end of this form. (300 word limit)
	<i>The guidelines from the Under Graduate School require a grade point average (GPA) 2.75 for Under Graduates, and a 3.00 for transferring graduates.</i>
10e	Identify the applicant pool and how applicants will be reached. (300 word limit)
	<i>Applicants to this program include incoming freshman from within Kentucky, out-of-state students, and transfer students from within UK. Freshman applicants from within the state will be reached via College of Agriculture, Food, and the Environment (CAFE) recruitment activities, as well as through reaching high school students who visit the Organic Farming Unit at UK through FFA and other high school-affiliated activities. Freshman from out-of-state will be reached through marketing in conjunction with other majors in CAFE recruiting out-of-state, as well as through Sustainable Agriculture Education Association recruitment venues. Students from states that may qualify for the Academic Common Market will be specifically targeted. Students transferring into the major from within UK will be reached through the recommendations from the CAFE Center for Student Success and via increased visibility of the major at the College- and University-levels with program formalization.</i>
11. Mission: Centrality to the Institution’s Mission and Consistency with State’s Goals	
11a*	(similar to question 2b) List the objectives of the proposed program? These objectives should deal with the specific institutional and societal needs that the program will address. (300 word limit)
	<ul style="list-style-type: none"> - Provide students with fundamental knowledge, practical field experience, integrative skills and an understanding of agriculture and food systems in the broader society. - Prepare students for careers in production agriculture, allied industries, food and agriculture organizations at points beyond the "farm gate" in the value chain, and other public and private sector employment opportunities.. - Engage non-agricultural students through the Sustainable Agriculture Minor so that agriculture enjoys a broader societal support base. - Augment courses of study for students in other agriculture majors through the Sustainable Agriculture Minor. - Create within the Commonwealth an academically rigorous program that has the potential to enhance farm profitability, reduce the environmental impacts of agriculture, and strengthen the social connections between farmers and consumers.
11b*	Explain how the program objectives above in item 11a support at least two aspects of UK’s institutional mission and academic strategic plan ? (150 word limit)
	<p><i>As stated in the UK Strategic Plan, as Kentucky’s flagship institution, the University plays a critical leadership role by promoting diversity, inclusion, economic development and human well-being. This program is designed to prepare students for careers across the agriculture and food systems sector, key areas of economic development and improved human health outcomes that are promoted with via the growing local food and agricultural economy.</i></p> <p><i>This program directly supports the UK 2015-2020 Strategic Plan Strategic Objective for Undergraduate Student Success: To be the University of choice for aspiring undergraduate students, within the Commonwealth and beyond, seeking a transformational education that promotes self-discovery, experiential learning, and life-long achievement. The program has a high degree of flexibility that promotes self-discovery and specialization, and explicitly incorporates experiential coursework throughout the students' course of study.</i></p>
11c*	How do the program objectives above in item 11a support at least two aspects of the Council on Postsecondary Education’s (CPE) Strategic Agenda and the statewide implementation plan? (300 word limit)
	<i>The program objectives contribute to the CPE Strategic Agenda by contributing to the Student Success policy objective by providing high-quality degree production and career readiness across the farm-to-plate spectrum. We have a consistent record of placing our students in positions in agriculture and allied industries, as well as in graduate school. The program objectives also contribute to the Research,</i>

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	<p><i>Education, and Community Development policy objective by increasing quality of life for graduates and citizens of the Commonwealth by increasing communities' capacity to sustain rural livelihoods through agricultural activities and build community food systems. Our program encompasses sustainable land stewardship, a focus on economic profitability across the farm-to-plate spectrum, and addresses issues of food access and social justice in rural and urban contexts.</i></p> <p><i>The program will further CPE statewide implementation plan by contributing to the goal for Adequate Funding by efficiently and effectively utilizing existing resources within UK and CAFE to administer and deliver this innovative, interdisciplinary program. Further, the program has shown a dedicated commitment to Accountability and assessment; in the over 10 years it has been operated as an Individualized Program, SLO and programmatic assessments have been conducted on the same schedule as any traditional, formalized program.</i></p>
11d*	<p>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"/></p> <p>(E.g. any program leading to teacher, principal, or superintendent certification, rank change, etc.)</p>
12. Resources	
12a*	<p>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)</p> <p><i>This interdisciplinary program receives support for instruction in the SAG Core courses by faculty with appointments in the Departments of Horticulture, Agricultural Economics, and Community and Leadership Development. It is supported by UK Core courses and Pre-Major requirements taught from other departments across the University, including the Departments of Biology, Chemistry, Math, Statistics, Writing, Rhetoric and Digital Media, and the CAFE GEN 100 program. It is supported by Departments with CAFE by required courses in CLD, AEC, and Plant and Soil Sciences. Emphasis area courses are offered by the above mentioned departments, as well as Anthropology. In each of these cases, a letter of support is offered as an Appendix to this form to demonstrate instructional support for the program. It is of note that this support currently exists, and no new support is being requested for this program's formal approval.</i></p> <p><i>The Sustainable Agriculture and Community Food Systems Program supports specialty support electives in the Horticulture, Plant and Soil Science, Agriculture and Technical Education, and Natural Resources and Environmental Studies majors through instructional support for directed electives in these majors, including SAG 210, 310, and 397.</i></p>
12b	<p>What will be the projected “faculty-to-student in major” ratio? (150 word limit)</p> <p><i>Historically the Sustainable Agriculture Program has prioritized a low faculty to student in major ratio, that trend is anticipated to continue with the formalized program. All SAG courses will be capped at 35 students, and all students will be advised by a faculty advisor in the major.</i></p>
12c	<p>Describe the library resources available¹⁸ 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)</p> <p><i>The UK Libraries offers collections, services and other learning/information resources consistent with the degrees offered at the University. UK Libraries fulfills the University's educational, research, and service missions through the acquisition, organization, and preservation of relevant information resources that support the academic and research programs. The print collections are housed in the ten libraries across the campus and in the print archives. UK Libraries' resources include: • 4 million volumes • access to 100,000 current serials, including 70,000 electronic serials accessible on and off campus • access to approximately 450 licensed networked electronic resources/databases • 550,000 electronic books accessible on and off campus • 100,000 audio/visual materials.</i></p>

¹⁸ Please contact Institutional Effectiveness (institutionaleffectiveness@uky.edu) for more information.

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12d	Describe the physical facilities and instructional equipment available to support this program. Physical facilities and instructional equipment must be adequate to support a high-quality program. Address the availability of classroom, laboratory, and office space, as well as any equipment needs. (300 word limit)
	<i>The Sustainable Agriculture Program currently utilizes classrooms in the Ag Science North, Garrigus, and Greenhouse Buildings for regular classroom and laboratory instruction. The UK Motor Pool is regularly utilized for transportation for off-campus experiential learning activities (laboratories, tours, etc.), with transportation fees paid by student course fees when local travel is a feature of the course. The program is supported at the Horticulture Research Farm with on-farm classroom and meeting space, as well the teaching farm and associated post-harvest handling facilities. This is significant, unique infrastructure that has been built previously for this program. It is of note that no additional courses are being created, nor instructional support requested with this proposal. As such, we are confident that instructional and experiential learning resources are adequate to support this high quality program.</i>
13. Demand and Unnecessary Duplication	
13a*	<p>Provide justification and evidence to support the need and demand for this proposed program. Include any data on student demand, career opportunities at any level, or any recent trends in the discipline that necessitate a new program. (300 word limit)</p> <ul style="list-style-type: none"> • This evidence is typically in the form of surveys of potential students and enrollments in related programs at the institution. • Anecdotal evidence is insufficient. Demonstrate a systematic collection of data, thorough study of the data, and a reasonably estimated student demand for the program. • Provide evidence of student demand at state and national levels.
	<p><i>Currently, only 14 LGU's in the country offer sustainable agriculture and/or food systems BA/BS degree-granting programs (Appendix A). This number has doubled in the past 10 years, and is part of a growing trend of experiential, interdisciplinary degree programs in Colleges of Agriculture and in the Sustainability Sciences. As with many of these programs, federal and state funding has prioritized creation of these programs via competitive education-focused grants (e.g. USDA Higher Education Challenge Grants), demonstrating priority and need at the national-level for creation of these programs. These programs are uniquely suited to train students to farm at a time when the average age of the US farmer is 57, and there is a growing national recognition that specialized beginning farmer training and emphasis on capturing higher value from farm products is needed.</i></p> <p><i>Further, with the growing local food movement and support for sustainable food systems across a suite of economic sectors uniquely situates our students for future employment. In the over 10 years this program has existed as an Individualized degree program, we have graduated over 50 students and successfully placed them in industry, farm management in both owner-operators and hired management positions, non-profit agriculture and food systems organizations, national service organizations, Cooperative Extension, and graduate school in the natural and social sciences.</i></p>
13b	Clearly state the degree completion requirements for the proposed program. (150 word limit)
	<i>Total number of hours required for degree: 120. Students must declare a program track (focus area), and select a minimum of 12 hours of coursework from suggested coursework in this track.</i>
13c*	<p>Will this program replace or enhance any existing program(s) or tracks (or concentrations or specializations) within an existing program? (300 word limit)</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>
	If "Yes," explain:
13d	Identify the primary feeders for the program. (150 word limit)
	<i>Applicants to this program include incoming freshman from within Kentucky, out-of-state students, and transfer students from within UK.</i>

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13e	Describe the student recruitment and selection process. (300 word limit)		
	<i>Freshman applicants from within the state will be reached via College of Agriculture, Food, and the Environment (CAFE) recruitment activities, as well as through reaching high school students who visit the Organic Farming Unit at UK through FFA and other high school-affiliated activities. Freshman from out-of-state will be reached through marketing in conjunction with other majors in CAFE recruiting out-of-state, as well as through Sustainable Agriculture Education Association recruitment venues. Students from states that may qualify for the Academic Common Market will be specifically targeted. Students transferring into the major from within UK will be reached through the recommendations from the CAFE Center for Student Success and via increased visibility of the major at the College- and University-levels with program formalization. Admission to the program will be open, limited only by admission requirements to the University of Kentucky.</i>		
13f*	Specify any distinctive qualities of the proposed program. (300 word limit)		
	<i>The Sustainable Agriculture and Community Food Systems major is the singular program at Kentucky's flagship university that integrates the production of food, fiber, and fuel in the broader fabric of the ecosystems, economies, and communities in which our agricultural systems is woven. This interdisciplinary program is unique within UK's sustainability-oriented programs due to the emphasis on agriculture and food systems; within environmental programs due to the emphasis on economic viability and cultural context; and within discipline-oriented majors with its consideration of whole systems rather than components. More practically, the Program Core Courses represent a broad foundation in economic viability in farming and food enterprises, environmental responsibility within agricultural production systems, and social responsibility and food access that are not required in any other major. The program has unique experiential learning capacity, including our Community Supported Agriculture project on the Horticulture Research Farm, where students in the SAG 397 course produce organic vegetables and fruits for over 200 UK families. Service learning, community-based projects and field trips, and applied laboratories are emphasized throughout the SAG courses and all students are encouraged to conduct independent, applied research or experiential learning in their Specialty Support (Guided Electives) coursework.</i>		
13g	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>Although we anticipate increased enrollment from existing UK and CAFE recruitment channels via increased exposure, we do not feel comfortable estimating enrollment from these avenues. However, additional recruitment from out-of-state students via the Academic Common Market is estimated at 2-4 students per year for the first 5 years after program approval. We believe there is potential for additional growth, as we hone this valuable and diverse recruitment pool. Based on previous student enrollment, we also believe that students may transfer into the Sustainable Agriculture and Community Food Systems major from other majors at UK, in lieu of leaving the campus for another institution out-of-state or higher education entirely. We have set these realistic recruitment targets after 10 years of working with this program, as well as discussions about joint recruitment strategies with other majors in the College who may seek to have students double-major in the program. These numbers are in addition to existing majors in the program.</i>		
13h	Use table below to estimate student demand for the first five years following implementation.		
	Academic Year	# Degrees Conferred	Majors (headcount) Fall Semester
	2018 - 2019	6	20
	2019 - 2020	7	25
	2020 - 2021	8	30
	2021 - 2022	10	35
	2022 - 2023	10	40-50
13i	Clearly describe all evidence justifying a new program based on changes in the academic discipline or other academic reasons. (300 word limit)		

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	<i>As discussed in 13a, the creation of Sustainable Agriculture and Food Systems-oriented majors is a trend in higher education, and are uniquely suited within Colleges of Agriculture to provide programming at the nexus of interdisciplinarity, real-world problem solving, experiential learning, and job training in a cutting edge field with significant community development potential. The proposed program builds upon a track record of over 10 years in a "pilot phase." In that time we have honed our curriculum, graduated over 50 students and successfully placed them in careers and graduate school, and build significant instructional capacity.</i>		
13j	Has the Council on Postsecondary Education identified similar programs?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	<i>(Please contact Institutional Effectiveness (institutionaleffectiveness@uky.edu) for help with this question.)</i>		
	If "Yes," the following questions (5h1 – 5h5) must be answered.		
(1)	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.? (150 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain:		
(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 type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain:		
(3)	Is access to existing programs limited? (150 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain:		
(4)	Is there excess demand for existing programs? (150 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain:		
(5)	Will there be collaboration between the proposed program and existing programs? (150 word limit)	Yes <input 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.		
13k*	Are there similar programs in other Southern Regional Education Board (SREB) 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.		
13k.i*	Identify similar programs in other SREC states and in the nation. See Appendix A for similar programs throughout the nation at Land Grant Institutions. However, it should be noted that these programs are not geographically convenient for students in Kentucky.		
13k.ii*	Does the program differ from existing programs in terms of curriculum, focus, objectives, etc.?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain. (300 word limit)		
13k.iii*	Does the proposed program serve a different student population (e.g., students in a different geographic area and non-traditional students) from existing programs?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," explain. (300 word limit)		

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13k.iv*	Is access to existing programs limited? If "Yes," explain. (300 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
13k.v*	Is there excess demand for existing similar programs? If "Yes," explain. (300 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
13k.vi*	Will there be collaboration between the proposed program and existing programs? If "No," explain. (300 word limit)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
13l	Would your institution like to make this program available through the Academic Common Market ¹⁹ ?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
13m	Clearly describe evidence of employer demand. 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 the over 10 years this program has existed as an Individualized Program in Agriculture, we have graduated over 50 students and placed them in areas of production agriculture, allied environmental industries, Cooperative Extension, non-profits, and entitites working in community food systems. We have been told verbally by employers such as Cooperative Extension that the sustainable agriculture nature of their degree was an asset to their application packet.</i>		
13n*	Describe the types of jobs available for graduates, average wages for these jobs, and the number of anticipated openings for each type of jobs at the regional, state, and national levels. <i>Students with a Sustainable Agriculture and Community Food Systems major will be work-force ready for farm management positions, junior/trainee positions in agribusinesses, program managers at food and agriculture non-profit organizations, and ready for graduate school in agriculture-related fields in the social, natural, and sustainability sciences. Based on alumni career data, average wages for these jobs are esimated below for graduates in Kentucky, although alumni are placed nationally: Non-profit sector: \$35,000 Farm management: \$30,000 Agribusiness: \$45,000</i>		
14. Assessment and Oversight			
14a	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) <i>Program-level evaluation will be conducted every 5 years, and recommendations incorporated into a Program Implementation Report that is reviewed and revised annually, reporting to the CAFE Assistant Dean of Administration. Student evaluation of the program will be conducted through exit interviews conducted annually with graduating seniors. Comments from students are collated, and where they coalesce</i>		

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

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	<i>into a common experience, are used as a guide to make course and program changes. Student evaluations will be used for individual courses. We will also monitor graduation rates and Under Graduate destinations.</i>
14b*	<p>Identify both the direct and indirect methods by which the intended student learning outcomes (SLOs) will be assessed. (300 word limit)</p> <p><i>SLO's will be assessed using the standard assessment exercise adopted in our Assessment Plan. The SLO's for the Sustainable Agriculture and Community Food Systems program are:</i></p> <ol style="list-style-type: none"> 1. <i>Demonstrate an understanding of the economic profitability, social responsibility and environmental stewardship components of sustainable agriculture;</i> 2. <i>Explain how the concept of sustainability is applied and practiced in local and global food systems.</i> 3. <i>Evaluate the sustainability of a site specific situation by applying an integrated, interdisciplinary understanding of sustainability in sustainable agriculture and food systems.</i> 4. <i>Articulate her/her own understanding of agricultural sustainability through oral and written communication</i>
14c	Procedures for Course Mapping of SLOs (related to question 5b)
14c.i	<p>Which components will be evaluated, i.e. course mapping? (300 word limit)</p> <p><i>The Basic Strategy For Program-Level Assessment Is The Same For All Program Learning Outcomes. We Will Use The Sag Core Courses (Sag-Prefix) To Generate Assessment Artifacts. Formative Assessments For All Slo's Will Be Conducted In The Introduction To Sustainable Ag And Community Food Systems Course (Sag 210) Course, As It Is The Common Entry Point Into The Curriculum. Only Artifacts From Sag Majors And Minors Will Be Evaluated. As We Have A Number Of Non-Sag Majors Taking This Course, We Will Select Only Declared Sag Majors And (Self-Declared) Sag Minor Students. Summative Assessment For Slo's Will Be Conducted From Course Activities In Advanced Sag Core Courses. Summative Assessment Of Learning Outcomes 1, 3, And 4 (Oral Communication Component) Will Be Conducted From Artifacts Generated In The Integration Of Sustainable Agriculture Principles (Sag 490) Course. Sag 490 Is A Senior Capstone Class, In Which Students Are Expected To Demonstrate The Ability To Draw Conclusions About The Sustainability Of Farming Systems And Food-Related Businesses And Non-Profit Organizations, Based On A Nuanced, Interdisciplinary Understanding Of Sustainable Food And Farming Systems. Summative Assessment For Learning Outcomes 2 And 4 (Written Communication Component) Will Be Collected From The Cultural Perspectives On Sustainability (Sag 310) Course. Sag 310 Examines The Socio-Cultural Dimensions Of Sustainability In Agriculture And Food Systems From A Global Perspective. Students Are Expected To Conduct Independent Research On A Global Agriculture And Food System Topic Of Their Choosing, And Through Assigned Written Work And Oral Presentations Critically Analyze The How The Concept Of Sustainability Is Applied And Practiced In Global And Local Food Systems. The Graduation Composition And Communications Requirement (Gccr) Is Tied To Slo 4, With The Written Component Assessed In Sag 310, And The Oral Component In Sag 490. A Curriculum Map Is Provided As An Addendum To This Document.</i></p>
14c.ii	<p>When will components be evaluated? (150 word limit)</p> <p><i>In the spring semester of each year, upon completion of artifact collection. (Note, as this program has been operating as an Individualized major, we have been continually generating artifacts and undergoing ongoing annual SLO assessment).</i></p>
14c.iii	<p>When will the data be collected? (150 word limit)</p> <p><i>Ongoing, with formative assessment artifacts for all SLO's collected beginning each fall in SAG 210. Summative assessments are collected in SAG 310 and SAG 490 in the Spring semesters when these courses are typically taught.</i></p>
14c.iv	<p>How will the data be collected? (150 word limit)</p>

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	<i>Data and artifacts will be collected through a variety of ways including exams, writing assignments, and course presentations that are course assignments in each of the associated courses.</i>
14c.v	<p>What will be the benchmarks and/or targets to be achieved? (150 word limit)</p> <p><i>Assessment results relate directly to quantitative benchmarks established to reflect the expectation of student mastery of foundation knowledge and critical skills as they progress through the program. Our target is that mean student scores will increase 25% from when they enter the program (formative assessments) to when the exit the program (summative assessment).</i></p>
14c.vi	<p>What individuals or groups will be responsible for data collection? (150 word limit)</p> <p><i>Faculty of the Sustainable Agriculture and Community Food Systems program.</i></p>
14c.vii	<p>How will the data and findings be shared with faculty? (150 word limit)</p> <p><i>Data and findings will be shared with appropriate faculty committees who will analyze and report findings to the full program faculty. Assessment data will also be shared with college-wide committees and submitted to the designated University bodies for SLO assessment review. This will occur on an annual basis.</i></p>
14c.viii	<p>How will the data be used for making programmatic improvements? (150 word limit)</p> <p><i>Data will be reviewed for making programmatic improvements at two levels. The fields of sustainable agriculture and food systems are complex and interdisciplinary. As such, our Learning Outcomes reflect the need for students to have both content knowledge in diverse subject areas, as well as the ability to communicate this knowledge in a holistic, systems context. Data (particularly below benchmark) will warrant review of specific assignments and courses used to generate assessment artifacts to determine if low scoring data are a function of students' inability to communicate these perspectives effectively. Modifications to assignments and in-class preparation will be made accordingly. Should low scores indicate insufficient content knowledge (that is, students lack both the perspective as well as the content knowledge), then an ad hoc review committee will be established to identify relevant coursework to the Learning Outcome to seek opportunities for improvement.</i></p>
14c.ix	<p>What are the measures of teaching effectiveness? (150 word limit)</p> <p><i>Teaching effectiveness will be evaluated from multiple measures. Teacher Course Evaluations will be used for quantitative, formal feedback for courses and instructors. As SAG core courses maintain a relatively small classroom size (under 40), instructors have frequent opportunities to interact with students. Informal interviews/discussion with students throughout their undergraduate degree will be used to evaluate effectiveness and areas of improvement. Students will also be asked about teaching effectiveness in their exit interview. Finally, instructors of SAG core courses conduct self-reflection based upon evidence of student learning from assignments considered central to the given course.</i></p>
14c.x	<p>What efforts to improve teaching effectiveness will be pursued based on these measures? (150 word limit)</p> <p><i>Efforts to improve teaching effectiveness will be based upon the particular course and feedback received. However, we have found through utilizing these methods that methods include, but are not limited to: revision of course workload and content; diversification of instructional methods, especially efforts to augment traditional lecture structure with active learning strategies; and generally increasing opportunities for active and experiential learning opportunities, as appropriate to the course content. It should also be noted that many of the core program teaching faculty are actively engaged in professional teaching societies, including the Sustainable Agriculture Education Association, and the National Association of Collegiate Teachers of Agriculture. The faculty regularly attend Association conferences, which offers an opportunity to exchange best practices with colleagues around the country.</i></p>
14c.xi	<p>What are the plans to evaluate students' post-graduate success? (150 word limit)</p> <p><i>Post-graduate success is evaluated based surveys of alumni, conducted as least every 3 years, as well as informal, regular contact with alumni (e.g. emails, phone calls). Particular attention will be paid to job placement in a position a) suited to a degree in sustainable agriculture, and b) student satisfaction with their position, will be noted. Post-graduate study and program of study will also be noted.</i></p>

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15. Cost and Funding of the Proposed Program²⁰					
15a	Will this program require additional resources?	Yes <input type="checkbox"/>	No <input checked="" 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)				
15b	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>This program utilizes courses taught throughout the University. Supporting documentation from affected departments/programs are provided as an appendix to this document.</i>				
15c	Provide adequate documentation to demonstrate sufficient return on investment to the state to offset new costs and justify approval for the proposed program. (300 word limit)				
	<i>No additional funds or other resources are being requested for this program. As described throughout this documents, we foresee formalization of this program to yield significant potential for recruitment of out-of-state students, as well as increased retention of students to the University transferring from within UK.</i>				
16.* Budget Funding Sources, by Year of Program (Please answer in terms of dollar amounts.)					
(Please note – all the fields in number 16 are required for the CPE’s pre-proposal form.)					
Total Resources Available from Federal Sources	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative/Explanation:					
Total Resources Available from Other Non-State Sources:					
	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative/Explanation:					
State Resources	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative/Explanation:					
Internal	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
(New) Allocated Resources					
(Existing) Reallocated Resources	\$70,559	\$72,676	\$74,856	\$77,102	\$79,415
Narrative/Explanation:	<i>Resources are associated with courses currently taughts by faculty that contribute to the program, including Jacobsen (0.41 FTE), Williams (0.16 FTE), Tanaka (0.10</i>				

²⁰ For questions about cost and funding of the program, please contact your department chair, business officer, or associate dean for academic affairs.

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FTE), and Rignall (0.10 FTE). Subsequent years are estimated at 3% cost of living increase, per UK OSPA grant proposal guidelines.

Student Tuition	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New	0	61795	135730	222930	325480
Existing	226400	247900	271460	297240	325480

Narrative/Explanation: *Tuition estimate for new students is based on current tuition and mandatory fees (\$11,320); subsequent year estimates are based on a 9.5% increase. Please note: tuition estimates are based on current enrollment of 20 students, which has remained relatively stable for the past 5 years. Existing enrollment is based on this baseline for all 4 years, with estimated tuition increase. New tuition funding is based on projected enrollment numbers, as described in 13h. 5th Year estimated on 40 students in the major.*

Total Funding Sources	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
<u>Total</u> New	0	61795	135730	222930	325480
<u>Total</u> Existing	296959	320576	346316	374342	404895

17. Breakdown of Program Expenses/Requirements⁴

(Please note – all the fields in number 17 are required for the CPE’s pre-proposal form.)

Staff: Executive, Administrative & Managerial	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					

Narrative/Explanation:

Faculty	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing	70559	72676	74856	77102	325480

Narrative/Explanation: *Resources are associated with courses currently taughts by faculty that contribute to the program, including Jacobsen (0.41 FTE), Williams (0.16 FTE), Tanaka (0.10 FTE), and Rignall (0.10 FTE). Subsequent years are estimated at 3% cost of living increase, per UK OSPA grant proposal guidelines.*

Student Employees	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					

Narrative Explanation/Justification:

Equipment and Instructional Materials	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					

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Narrative Explanation/Justification:					
Library	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Contractual Services	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Academic and/or Student Services	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Other Support Services	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Faculty Development	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Assessment	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					
Narrative Explanation/Justification:					
Other	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
New					
Existing					

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Narrative Explanation/Justification:					
Total Program Budgeted Expenses/Requirements	1st Year	2nd Year	3rd Year	4th Year	5th Year
New					
Existing	70,559	72,676	74,856	77,102	325,480
<u>TOTAL</u> Program Budgeted Expenses/Requirements:	<i>As described in individual line items, all program related expenses are reallocated expenses associated with teaching assignments from existing faculty. We did not include program costs associated with administration and other routine services.</i>				
GRAND TOTAL	1st Year	2nd Year	3rd Year	4th Year	5th Year
TOTAL NET COST:	70,559	72,676	74,856	77,102	325,480

18. Course Descriptions

18a	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)
SAG 210	<i>A broad introduction to the environmental, economic and cultural components of sustainable food production and marketing. The definition, emergence, and growth of sustainable agriculture are discussed along with pertinent soil, crop and livestock management practices. Relationships between environmental stewardship, producer profitability, and community-based food systems are emphasized.</i>
SAG 310	<i>This course focuses on the social processes and cultural mechanisms that underlie everyday agricultural practices, in the U.S. and abroad. By comparing agriculture and food systems between the U.S. and other countries, the course helps students appreciate distinctiveness of each society's effort to build agricultural sustainability and recognize the common challenges of such an effort in the context of globalized agricultural trade and food production. Prereq: SAG 210. This course comprises a portion of the Graduation Composition and Communication Requirement (GCCR) course in certain programs, and hence is not likely to be eligible for automatic transfer credit to UK.</i>
SAG 397	<i>Provides students with hands-on experience operating an organic community supported agriculture produce farm and marketing its harvest in the local community. Students receive training across the full range of production and marketing activities under the guidance of the Course Coordinator and the professional staff of the farm management team. Prereq: SAG 210 and SAG 310, or consent of instructor.</i>
SAG 490	<i>This course provides an intensive opportunity for students to integrate critical aspects of sustainability into a semester-long project. The project will involve research, design, and implementation phases, and students will present their work in both written and oral forms. This class will also allow students to gain a deeper understanding of a range of topics related to sustainable agriculture through field trips to local agriculture and food system entities, and hands-on workshops where skills and techniques are learned. Field trip and workshop topics will be determined by the students and instructor at the beginning of the semester. Additionally, students will gain first-hand experience in sustainable agriculture by taking a spring break study tour to visit exemplary agriculture sites in a region of the United States. This course comprises a portion of the Graduation Composition and Communication Requirement (GCCR) course in certain programs, and hence is not likely to be eligible for automatic transfer credit to UK. A course fee is required, as indicated by notification during course registration.</i>

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18b	Program Guided Electives Courses (for the major)	
Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)	
	<i>See Appendix D, Program 4-Year Plan and Program Track Courses</i>	
18c	Program Free Electives Courses	
Prefix & Number	Course Description (from the Bulletin or the most recent new/change course form)	
	<i>Free electives may be chosen as needed to achieve at least 120 credit hours.</i>	
18d	Courses for a Track. (If multiple tracks are available, click HERE 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	<i>See Appendix D. All courses are track elective courses.</i>
	<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	

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<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	

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19. Specific faculty involved in the degree program.

(similar to question 4d) Fill out the SACS²¹-required faculty roster below, for full-time and part-time faculty teaching in the program. Abbreviations for the NAME and COURSES TAUGHT columns are below the table. *Please contact Institutional Effectiveness (institutionaleffectiveness@uky.edu) for help with this question.*

NAME	COURSES TAUGHT	ACADEMIC DEGREES AND COURSEWORK	OTHER QUALIFICATIONS AND COMMENTS
List name & Identify faculty member as FT or PT.	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.
<i>Krista Jacobsen (FT)</i>	<i>Fall and Spring terms; SAG 210; Introduction to Sustainable Agriculture and Community Food Systems; 3 hours. UT.</i>	<i>University of Kentucky, Individualized Program in Agriculture - Sustainable Agriculture: SAG 210 (formerly SAG 101), SAG 310 (formerly SAG 201), SAG/PLS 390 (Agroecology).</i>	<i>An agroecologist who has taught SAG 210 (formerly SAG 101) for 9 years, current DUS of the Individualized program.</i>
<i>Karen Rignall (FT)</i>	<i>Fall and Spring terms; SAG 210; Introduction to Sustainable Agriculture and Community Food Systems; 3 hours (alternating with Tanaka). UT. Spring term; SAG 310; 3 hours (alternating with Tanaka). UT</i>	<i>University of Kentucky Sociology Program; SOC 380 Economic Globalization. University of Kentucky Individualized Program in Agriculture-Sustainable Agriculture: SAG 310.</i>	<i>A food systems-oriented anthropologist who is currently teaching the SAG 310 course. She will co-teach SAG 210 with a natural scientist (Jacobsen), alternating with Tanaka.</i>
<i>Keiko Tanaka (FT)</i>	<i>Fall and Spring terms; SAG 210; Introduction to Sustainable Agriculture and Community Food Systems; 3</i>	<i>University of Kentucky, Individualized Program in Agriculture - Sustainable</i>	<i>A rural sociologist with expertise in food systems, Tanaka developed SAG 310 (formerly SAG 201) as a UK Core course,</i>

²¹ Southern Association of Colleges and Schools Commission on Colleges (SACS).

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	<i>hours (alternating with Tanaka). UT. Spring term; SAG 310; 3 hours (alternating with Tanaka). UT</i>	<i>Agriculture: SAG 310 (formerly SAG 201)</i>	<i>has taught the course for 7 years, and oversees the GCCR component of the course.</i>
<i>Mark Williams (FT)</i>	<i>Fall term; SAG 397; Apprenticeship in Sustainable Agriculture; 3 hours. UT. Spring term; SAG 490; Integration of Sustainable Agriculture Principles; 3 hours. UT.</i>	<i>University of Kentucky, Individualized Program in Agriculture - Sustainable Agriculture: SAG 397, SAG 490.</i>	<i>The original DUS of the program who has developed the teaching farm and capstone courses associated with the program and directed assessment and reporting activities for nearly 10 years.</i>
FT = full time PT= part time	D = developmental UN = undergraduate nontransferable UT = undergraduate transferable G = graduate		

Appendix A: Sustainable Agriculture-Oriented Degree Programs at Land-Grant Universities.

Data sourced from the Sustainable Agriculture Education Association Program Listings; updated from Jacobsen et al., 2011**.*

Land Grant University	Program Name	Degree	Year Established	Program URL
Major Degree Programs				
Clemson University	Soils and Sustainable Crop Systems	B.S. Major	2007	https://www.clemson.edu/public/sustainableag/
Montana State University	Sustainable Food & Bioenergy Systems	B.S. Major	2009	http://sfbs.montana.edu/
University of California-Davis	Sustainable Agriculture & Food Systems	B.S. Major	2011	https://www.ucdavis.edu/majors/sustainable-agriculture-and-food-systems/
University of Hawaii	Sustainable Community Food Systems	B.A.S. Major	ca. 2016	http://www.uhwo.hawaii.edu/academic/s/degrees-and-certificates/bachelor-of-applied-sciences/food-systems/
University of Kentucky	Sustainable Agriculture	B.S. Major, Individ. Curriculum	2007	https://sustainableag.ca.uky.edu/
University of Maine	Sustainable Agriculture	B.S. Major	1988	https://umaine.edu/foodandagriculture/bs-sustag/
University of Massachusetts	Sustainable Food & Farming	B.S. Major	2013	https://stockbridge.cns.umass.edu/SFF-BS
University of Minnesota	Food Systems	B.S. Major	2013	https://www.cfans.umn.edu/academics/majors-minors/food-systems
University of Missouri	Sustainable Agriculture	B.S. Major	2014	https://cafnr.missouri.edu/degrees-and-programs/sustainable-ag/
University of New Hampshire	Ecogastronomy	Dual Major	2008	https://www.unh.edu/ecogastronomy/homepage
University of New Hampshire	Sustainable Agriculture and Food Systems	B.A. and B.S. Majors	ca. 2011	https://sustainableag.unh.edu/anfs/safs

University of Vermont	Ecological Agriculture	B.S. Major	2004	http://www.uvm.edu/~pss/?Page=EcAg.html&SM=under_prog_menu.html
University of Wyoming	Agroecology	B.S. Major	ca. 1998	http://www.uwyo.edu/esm/undergraduate-programs/majors/agroecology/
Washington State University	Organic Agriculture	B.S. Major	ca. 2010	http://afs.wsu.edu/majors/organic-ag-systems/

* <http://www.sustainableaged.org/projects/degree-programs/>; last accessed 11/26/2017.

** Jacobsen, K.L. *, K.L. Niewolny, M.S. Schroeder-Moreno, M. Van Horn, A.H. Harmon, Y.H. Chen Faslow, M. Williams, D. Parr. 2012. Sustainable Agriculture Undergraduate Degree Programs: A Land-Grant University Mission. *Journal of Agriculture, Food Systems and Community Development* 2(3): 13-26.

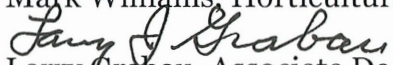


College of Agriculture,
Food and Environment
Center for Student Success

July 31, 2017

MEMORANDUM

TO: Lee Meyer, Agricultural Economics, SC Chair
Krista Jacobsen, Horticulture, DUS
Darrh Bullock, Animal and Food Sciences
Kristi Durbin, CSA Manager
Michael Goodin, Plant Pathology
Erin Haramoto, Plant and Soil Sciences
Sarah Lovett, SAG program graduate
Karen Rignall, Community and Leadership Development
Robert Sandmeyer, Philosophy
Tammy Stephenson, Dietetics and Human Nutrition
Keiko Tanaka, Community and Leadership Development
Mark Williams, Horticulture

FROM: 
Larry Grabau, Associate Dean for Instruction

RE: Your appointment to the Steering Committee (SC) for the Individualized Program in Sustainable Agriculture for AY 2017-18 in the College of Agriculture, Food and Environment.

C: Deans Cox and Kornbluh; Chairs Bastin, Coffey, Harrison, Houtz, Look, Maynard, Pfeiffer, and Schardl.

Thank you for agreeing to serve as members of this Steering Committee for the 2017-18 academic year under the leadership of SC Chair Lee Meyer and DUS Krista Jacobsen. Dean Cox and I very much appreciate your service to this emerging undergraduate program.

see blue.

From: [Barnett, Barry](#)
To: [Jacobsen, Krista L](#)
Cc: [Brown, Roger](#)
Subject: Sustainable Agriculture
Date: Thursday, February 8, 2018 8:25:40 AM

Krista,

At its February 7, 2018 meeting, the Agricultural Economics Department faculty voted to endorse the formal creation of an undergraduate degree program in Sustainable Agriculture with the inclusion of the following AEC courses as part of that program's curriculum:

Required Courses (All SAG Majors)

AEC 302 Agricultural Management Principles (4 credits)
AEC 305 Food and Agricultural Marketing Principles
AEC 445G Introduction to Environmental and Resource Economics

Specialty Support Options (Some SAG Majors)

AEC 309 International Agriculture, World Food Needs, and U.S. Trade in Agricultural Products
AEC 300 Economics of Nonprofits
AEC 532 Agricultural and Food Policy
AEC 311 Livestock and Meat Marketing
AEC 316 Cooperative Management and Marketing (1 credit)
AEC 317 Marketing Horticultural Products (1 credit)

Please let me know if you have any questions.

Barry Barnett

Barry J. Barnett
Professor and Chair
Department of Agricultural Economics
University of Kentucky
400 Charles E. Barnhart Bldg.
Lexington, KY 40546-0276
E-mail: barry.barnett@uky.edu
Phone: 859-257-7277
Fax: 859-323-1913

Dr. Krista L. Jacobsen
Associate Professor of Sustainable Agriculture
Department of Horticulture
University of Kentucky

Dr. Jacobsen:

I am providing this letter to voice my department's support for listing ASC 300, ASC 325, ASC 340, ASC 362, ASC 362, ASC 378, ASC 400G and ASC 410G as suggested electives for the Sustainable Agriculture Undergraduate Degree Program, in addition to the current listing of the required ASC 382.

Respectfully submitted,



Dr. Richard Coffey, Chair
Department of Animal and Food Sciences

From: [Cliggett, Lisa](#)
To: [Jacobsen, Krista](#)
Cc: [King, Diane](#)
Subject: RE: Sustainable Agriculture and Community Food Systems New Program Proposal
Date: Friday, November 30, 2018 4:19:50 PM

Hi Krista –

At our faculty meeting today (November 30, 2018) the anthropology faculty of record discussed and approved unanimously (11 faculty in attendance) the inclusion of ANT 303; ANT 338 and ANT 225 as electives in the proposed “Community Food Systems Track” of the new Sustainable Agriculture major.

We also discussed other courses in our program that might serve the needs of this concentration. We offer a new “Food, Culture and Society” course (ANT245), and we frequently offer topical courses under the ANT350-352 course numbers. Food related courses under these numbers have included Origins of Agriculture, and Food Pathways in Ancient and Modern Times. We voted to approve including any and all of these courses as electives in your major.

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

Thanks.

Lisa

Lisa Cliggett, PhD

Professor and Chair, Anthropology



Vincent Cassone, Ph.D
Professor and Chair
Department of Biology
101 T.H. Morgan Building
Lexington, KY 40506-0225
859-257-9322
Fax: 859 257-1717
Email: cassone@uky.edu

Dear Dr. Jacobsen:


Thank you for the opportunity to express our support of the formalization of a BS degree in Sustainable Agriculture in the College of Agriculture, Food and Environment. The Department of Biology is pleased to provide support in offering BIO 148 and 152 to your Sustainable Agriculture undergraduate students as a pre-major requirement.

If I can be of further assistance, please let me know.

Sincerely,

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

Vincent Cassone, Ph.D.
Professor and Chair, Department of Biology

TO: Krista Jacobsen
FROM: Michael Montross 
DATE: January 14, 2019
SUBJECT: Elective for Sustainable Agriculture and Community Food Systems

The Department of Biosystems and Agricultural Engineering is supportive of the formalization of the BS degree in Sustainable Agriculture and Community Food Systems in the College of Agriculture, Food and Environment. The Department of Biosystems and Agricultural Engineering is pleased to provide support in offering AEN 252 as an optional elective in the Farming Systems track.

If I can be of further assistance, please let me know.

see blue.

January 17, 2018



University of Kentucky
College of Arts and Sciences
Department of Chemistry
161 Jacobs Science Building
Lexington, KY 40506
P: 859-257-7080
<https://chem.as.uky.edu/>

Prof. Krista Jacobsen
Sustainable Agriculture
College of Agriculture, Food, and the Environment
University of Kentucky
Lexington, KY 40506

Re: CAFE SAG Majors Taking CHE 104 & 108 - New Program Approval

Dear Prof. Jacobsen:

The Chemistry Department at UK sees no issues with the Chemistry pre-major requirements (CHE 104 and CHE 108) for the new program in Sustainable Agriculture in the College of Agriculture, Food, and the Environment. We will endeavor to meet the needs of the students in your program.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Meier', with a large, stylized flourish extending to the left.

Mark Meier
Professor and Chair
Department of Chemistry



University of Kentucky
College of Agriculture, Food
and Environment

Dr. R. Wes Harrison
Community and Leadership Development
500 Garrigus Bldg.
Lexington, KY 40506

P: 859-257-7586
F: 859-257-1164
www.uky.edu

March 15, 2018

Dear Dr. Jacobsen:

I am writing to express support for SAG's new program approval and reaffirm my approval of SAG students in CLD courses. The relevant courses include approval of SAG students taking CLD 102 as a pre-major requirement and CLD 360, 420, and 517 as part of the "Social Sustainability" cluster within the major. Furthermore, they are encouraged to take CLD 345, 401, 445, and 480 as part of an emphasis area.

Please contact me should you need anything further.

Sincerely,

A handwritten signature in blue ink that reads "R. Wes Harrison".

R. Wes Harrison, Chair
Community and Leadership Development



Department of Dietetics & Human Nutrition
203 Funkhouser Building
Lexington, KY 40506-0054
859 257-3800
fax 859 257-3707
www.uky.edu

November 8, 2018

Dear Dr. Jacobsen,

We are pleased to support this stand-alone major, BS in Sustainable Agriculture and Community Food Systems. Our department will offer the following courses to help students fulfill the degree requirements:

- DHN 212 Introductory Nutrition
- DHN 318 Hunger, Food Behaviors, and Environment
- DHN 319 Seminar in Hunger Studies
- DHN 320 Experiential Learning in Hunger Studies

The Department of Dietetics and Human Nutrition fully supports the addition of this major to the UK degree programs.

Kind Regards,

A handwritten signature in cursive script that reads 'Janet Mullins'.

Janet Tietyen Mullins, PhD, RDN
Professor and Chair
Department of Dietetics and Human Nutrition
janet.mullins@uky.edu
Cell: 859-421-5029

From: [Patel, Darshak](#)
To: [Jacobsen, Krista L](#)
Subject: Re: CAFE SAG Majors Taking ECO 201 - New Program Approval
Date: Wednesday, January 17, 2018 10:25:08 AM

Dear Dr. Jacobsen,

I have no opposition to this request. I have sent my approval to the chair.

Darshak Patel, PhD

Senior Lecturer of Economics

Director of Undergraduate Studies

Gatton College of Business and Economics

University of Kentucky

phone: (859) 323-3776

office: 225P

website: gatton.uky.edu



From: "Jacobsen, Krista L" <krista.jacobsen@uky.edu>
Date: Wednesday, January 17, 2018 at 6:16 AM
To: Darshak Patel <darshak.patel@uky.edu>
Subject: CAFE SAG Majors Taking ECO 201 - New Program Approval

Dear Dr. Patel,

I am writing you as the DUS of the Sustainable Agriculture program in the College of Agriculture, Food, and the Environment. Although our major and minor degree programs have been in place for over 10 years, our Bachelors of Science has been offered under an "Individualized Curriculum" model in CAFÉ during this time. We are seeking to "formalize" the major, and are submitting a New Program Form and supplemental paperwork through the Undergraduate Curriculum Councils at the College- and Senate-levels.

As a part of this paperwork, we are seeking a letter of support from your unit to indicate that your program supports our students taking ECO 201 as a Pre-Major Required course for the Sustainable Agriculture major. We have found that ECO 201 prepares the students well for their required upper-level Agricultural Economics coursework (AEC 302, 305, and 445G), and is a required pre-requisite for these courses. It might be of note that our students have historically taken these course, and we are simply seeking formal approval to continue this requirement. I have attached our major sheet for your reference. Please don't hesitate to let me know if there are any questions about the course or the support we are seeking.

My understanding is that an email from a Chair or Unit Head indicating support would be sufficient. However, if your unit would rather have this approved via a faculty or curriculum committee meeting-level, we certainly defer to your preference. If the approval is handled from a group meeting perspective, we would simply need some documentation of the meeting minutes indicating

discussion of this issue, and the outcome of the faculty vote.

Dr. Patel, thank you so much for considering this request. Again, if I may answer any questions, please don't hesitate to let me know. I hope your semester is off to a great start!

Krista Jacobsen

Krista L. Jacobsen, PhD
Assistant Professor
Department of Horticulture
University of Kentucky
Krista.jacobsen@uky.edu
www.jacobsenlab.org
www.sustainableaged.org

From: [Palli, Subba](#)
To: [Jacobsen, Krista](#)
Cc: [Haynes, Kenneth](#)
Subject: RE: Letter requested - Sustainable Agriculture and Community Food Systems New Program Proposal
Date: Friday, November 16, 2018 3:23:55 PM
Attachments: [image001.png](#)

Dear Dr. Jacobsen,

I am writing to express Entomology department support to include ENT 300 and ENT 320 as electives for the Sustainable Agriculture Undergraduate Degree Program. I consulted with the instructors who teach these courses and also our director of undergraduate studies; they are in support of offering these two classes as electives.

Good luck with your application.

Reddy

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



*Jeffrey W. Stringer, Ph.D.,
Chair, Department of Forestry and Natural Resources
105 T.P. Cooper Building
University of Kentucky
Lexington, KY 40546-0073
P: 859-257-7596
www.ukforestry.org*

Dear Dr. Jacobsen,

Based on a faculty vote, the Department of Forestry and Natural Resources is supportive of both the formalization of the BS degree in Sustainable Agriculture and Community Food Systems in the College of Agriculture, Food and Environment and in offering FOR 340 (Forest Ecology) as an optional elective in the Farming Systems track.

If I can be of further assistance, please let me know.

Respectfully,

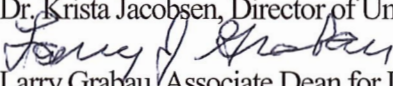
A handwritten signature in black ink that reads 'Jeffrey W. Stringer'. The signature is written in a cursive style with a large, sweeping flourish at the end.

Jeffrey W. Stringer,

*James G. Brown Endowed Professor
Chair, Forestry and Natural Resources*

January 18, 2018

MEMORANDUM

TO: Dr. Krista Jacobsen, Director of Undergraduate Studies, Individualized Program in Sustainable Agriculture
FROM:  Larry Grabau, Associate Dean for Instruction, College of Agriculture, Food and Environment
RE: Support for GEN 100 Instruction
C: Drs. Ali Rossi-Meyer and Lindsay Shade, Co-Coordinator, GEN 100

As the Sustainable Agriculture (Individualized Program) faculty work to develop a full-fledged, Sustainable Agriculture B.S. program, I am happy to offer the support of the Center for Student Success in providing GEN 100 instruction for students who will enroll in this emerging program.

see blue.



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

November 30, 2018

Professor Krista Jacobsen
Department of Horticulture
University of Kentucky

Dear Professor Jacobsen,

I am writing to confirm that geography faculty members were consulted and unanimously approved the inclusion of the courses listed below as electives in the new degree program on Sustainable Agriculture and Community Food Systems in the Community Food Systems track:

- GEO 235 Environmental Management and Policy
- GEO 316 Environment and Development
- GEO 431 Political Ecology

Sincerely,

A handwritten signature in black ink that reads "Patricia Ehrkamp". The signature is written in a cursive style.

Patricia Ehrkamp
Associate Professor and Chair



**UNIVERSITY
OF KENTUCKY** College of Agriculture, Food and Environment

Robert L. Geneve, Professor
Department of Horticulture
401-b Plant Science Building
Lexington, Kentucky 40546-0091
Phone: (859)257-8610
FAX: (859)257-2859
E-mail Rgeneve@uky.edu

January 30, 2018

Dear Dr. Jacobsen

I am writing to convey the support of the Department of Horticulture for the inclusion of PLS 386 as a required course in Sustainable Agriculture and Community Food Systems' Environmental Stewardship course cluster. We also endorse inclusion of 9 hours of PLS coursework (including PLS 220, 336, 337, 390, 520, and 525) in the Farming Systems Emphasis Area. Please let me know if you need any additional information.

Sincerely,

Robert Geneve, Professor
Director of Undergraduate Studies HPLS

Robert L. Houtz, Professor and Chair



University of Kentucky
College of Arts and Sciences
Department of Mathematics

31 January 2018

Dr. Krista Jacobsen
Department of Horticulture
University of Kentucky

Dear Dr. Jacobsen:

I am writing regarding the UK Core QFO requirement in the Sustainable Agriculture Major. In general, we encourage majors to accept any QFO course (including courses offered by other Departments) unless they need a particular course as a prerequisite for another course in the major.

Your request was discussed by our Undergraduate Committee at a meeting on Tuesday, 30 January 2019 and they support your request to have your students take MA 109, College Algebra, if this course is needed to prepare for MA 123 or other courses in your major. We expect to have sufficient seats in this course to accommodate your students. Please note that MA 109 was recently added to UK Core and this may simplify requirements for your students.

Sincerely,

A handwritten signature in blue ink that reads "Russell Brown".

Russell Brown
Professor and Chair

see blue.



Department of Philosophy
1415 Patterson Office Tower
Lexington, KY 40506-0027

859-940-2494
fax 859 257-3286

www.uky.edu

Philosophy Department
Course Approval

November 13, 2018

Dear Professor Jacobsen,

I am writing as Chair of Philosophy to indicate strong support for the Sustainable Agriculture Program of the School of Agriculture. The Department of Philosophy is able to offer PHI 120 – Introductory Logic and PHI 205 – Food Ethics as required courses in the Sustainable Agriculture Program. We also recommend listing PHI 363 as a suggested elective for our Community Food Systems track. The Philosophy Department encourages the use of PHI 120 to fulfill the Quantitative Foundations area of UK Core, and Philosophy enthusiastically supports listing PHI 205 within the “Social Responsibility” required course cluster in the Sustainable Agriculture Program.

A handwritten signature in black ink that reads "Brandon A. Ford". The signature is written in a cursive style with a large, stylized initial "B".

Chair, Philosophy Department

From: [Schardl, Christopher](#)
To: [Jacobsen, Krista](#)
Cc: [Schardl, Christopher](#); [Vincelli, Paul](#)
Subject: Support for the Sustainable Agriculture and Community Food Systems New Program Proposal
Date: Tuesday, December 4, 2018 11:58:25 AM
Importance: High

Dear Dr. Jacobsen

The faculty of Plant Pathology met yesterday and voted unanimously to approve the inclusion of PPA 400G, and any other course taught by our faculty now and in the future, as an elective for the Sustainable Agriculture and Community Food Systems Program.

If you need any more information or feedback from me, please ask.

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/>



University of Kentucky

Dr. Rebecca L. McCulley

Professor & Chair

Dept. of Plant & Soil Sciences

Plant Science Bldg, Rm 106

Lexington, KY 40546-0312

P: 859-257-6388

F: 859-323-1952

www.mcculleylab.org

Date: November 13, 2018

Subject: Plant & Soil Sciences support of SAG

To Whom It May Concern:

The Director of Undergraduate Studies for the Sustainable Agriculture (SAG) program, Dr. Krista Jacobsen, requested that I poll the faculty in my Department who currently teach classes that SAG students take and ask them whether they will continue to support and encourage SAG majors in the future, as part of the degree program formalization process that they are currently undergoing. Affected faculty and classes include:

PLS 366, Soils, Matocha, McNear

PLS 220, Plant ID, Phillips

PLS 404, Integrated Weed Management, Haramoto

PLS 412, Grain crops, Chad Lee

PLS 468G, Soil Use and Management, Coyne, Wendroth

PLS 470G, Nutrient Management, McGrath

PLS 510 Forage Management and Utilization, Goff

PLS 520, Fruit and Vegetable Production, Archbold

PLS 531, Field School in Crop Pest Management, Haramoto

I have received email confirmation from all affected faculty that they universally support SAG majors remaining in their courses moving forward.

Sincerely,

A handwritten signature in blue ink that reads "Rebecca L. McCulley".

Rebecca L. McCulley

From: [Brown, Jordan T](#)
To: [Jacobsen, Krista L](#)
Subject: Re: CAFE SAG Majors Taking SOC courses - New Program Approval
Date: Friday, January 19, 2018 3:33:33 PM

Hi Krista,

Just an update the faculty vote unanimously to support (10 yes, 0 no, 0 abstenentions) SAG students taking these courses. As soon as I receive a copy of the minutes from the meeting I will forward these as well.

Thanks,
Jordan

Jordan Brown
Lecturer
Department of Sociology
Director of Undergraduate Studies
University of Kentucky



Department of Statistics
349 Multidisciplinary Science Building
725 Rose Street
Lexington, KY 40536-0082
859 257-6115

To: Krista L. Jacobsen, PhD
From: Bill Rayens, Associate Chair
Department of Statistics
Date: January 17, 2018

We understand that the Sustainable Agriculture program in the College of Agriculture, Food, and the Environment is in the process of formalizing their major and minor degree programs. Please receive this letter as acknowledgement and support for your students continuing to take STA 210 as an option to fulfill their Statistical Inferential Reasoning UK Core requirement, and fulfill a Pre-Major requirement. I am authorized to deliver this support for the Department and no full faculty approval is required by our Department for this kind of acknowledgment.

We look forward to the continued presence of your students in STA 210.

From: [Rice, Jeffrey](#)
To: [Pennell, Michael](#); [Jacobsen, Krista L](#)
Cc: [Ridolfo, Jim](#)
Subject: Re: CAFE SAG Majors Taking WRD 100 &111 - New Program Approval
Date: Thursday, January 18, 2018 9:28:07 AM

Hi Krisa

This email confirms WRD's support for students in CAFE as SAG majors taking WRD 110 and WRD 111 as part of their overall requirements.

Jeff Rice

but...on a side note, all students have to take these courses anyways, and your course plan does allow students the option between CIS and WRD.

Jeff

On 1/18/18 9:19 AM, Pennell, Michael wrote:

Hi Krista,

I'm copying Jim Ridolfo, our Director of Composition, as well as Jeff Rice, Chair of our department. They should be able to get you an email of support.

Best,
Mike

Mike Pennell
Associate Professor | Director of Undergraduate Studies
Department of Writing, Rhetoric, & Digital Studies
University of Kentucky

From: Jacobsen, Krista L
Sent: Wednesday, January 17, 2018 6:23 AM
To: Pennell, Michael
Subject: CAFE SAG Majors Taking WRD 100 &111 - New Program Approval

Dear Dr. Pennell,

I am writing you as the DUS of the Sustainable Agriculture program in the College of Agriculture, Food, and the Environment. Although our major and minor degree programs have been in place for over 10 years, our Bachelors of Science

has been offered under an “Individualized Curriculum” model in CAFÉ during this time. We are seeking to “formalize” the major, and are submitting a New Program Form and supplemental paperwork through the Undergraduate Curriculum Councils at the College- and Senate-levels.

As a part of this paperwork, we are seeking a letter of support from your unit to indicate that your program supports our students taking Composition and Communication I & II as required UK Core courses that fulfill a component of the UK composition and communication requirements. It might be of note that our students have historically taken these course, and we are simply seeking formal approval to continue this requirement. I have attached our major sheet for your reference. Please don’t hesitate to let me know if there are any questions about the course or the support we are seeking.

My understanding is that an email from a Chair or Unit Head indicating support would be sufficient. However, if your unit would rather have this approved via a faculty or curriculum committee meeting-level, we certainly defer to your preference. If the approval is handled from a group meeting perspective, we would simply need some documentation of the meeting minutes indicating discussion of this issue, and the outcome of the faculty vote.

Mike, thank you so much for considering this request. Again, if I may answer any questions, please don’t hesitate to let me know. I hope your semester is off to a great start!

Krista

Krista L. Jacobsen, PhD
Assistant Professor
Department of Horticulture
University of Kentucky
Krista.jacobsen@uky.edu
www.jacobsenlab.org
www.sustainableaged.org

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

SUSTAINABLE AGRICULTURE & COMMUNITY FOOD SYSTEMS UNDERGRADUATE CURRICULUM

DEPT.	COURSE	DESCRIPTION	CREDITS
UK CORE REQUIREMENTS			
I. INTELLECTUAL INQUIRY –Arts and Creativity: Three hours from approved list			3
II. INTELLECTUAL INQUIRY - Humanities: Three hours from approved list			3
III. INTELLECTUAL INQUIRY - Social Sciences: CLD 102 or SOC 101 (satisfies Pre-Major requirement)			3
IV. INTELLECTUAL INQUIRY – Natural, Physical and Mathematical Sciences: Three hours from approved list			3
V, VI. COMPOSITION AND COMMUNICATION I and II: CIS 110 or WRD 110 <i>and</i> CIS 111 or WRD 111			6
VII. QUANTITATIVE REASONING - Quantitative Foundations: MA 109 (satisfies Pre-Major requirement) or PHI 120			3
VIII. QUANTITATIVE REASONING - Statistical Inferential Reasoning: STA 210 (satisfies Pre-Major requirement)			3
IX. CITIZENSHIP - Community, Culture and Citizenship in the United States: Satisfied by GEN 100			3
X. CITIZENSHIP - Global Dynamics: Satisfied by SAG 310, satisfies GCCR requirement			3
SUB-TOTAL			30
COLLEGE OF AGRICULTURE REQUIREMENT			
GEN	100	Issues in Agriculture (Satisfies Gen Education IX)	-
PRE-MAJOR REQUIRMENTS			
These are CLD 102 or SOC 101; MA 109 or equivalent; STA 210 <i>and</i> the following courses:			
ECO	201	Principles of Economics I	3
CHE	104	Introductory General Chemistry	3
CHE	108	Intro to Inorganic, Organic, and Biochemistry	3
BIO	148	Principles of Biology I	3
BIO	152	Principles of Biology II	3
DHN	212	Introductory Nutrition	3
SUB-TOTAL 48			18
MAJOR REQUIREMENTS			
<i>Environmental Stewardship Cluster</i>			
ASC	382	Principles of Livestock Production	3
PLS	366	Fundamentals of Soil Science	4
PLLS/SAG	386	Plant Production Systems	4
<i>Economic Profitability Cluster</i>			
AEC	302	Agricultural Management Principles	4
AEC	305	Food and Agricultural Marketing Principles	3
AEC	445G	Introduction to Resource and Environmental Economics	3
<i>Social Responsibility Cluster</i>			
PHI	205	Food Ethics	3
SOC	360	Environmental Sociology	3
SOC/CLD	420 or 517	Community Analysis or Rural Sociology	3
SUB-TOTAL 78			30
SUSTAINABLE AGRICULTURE CORE			
SAG	210	Introduction to Sustainable Agriculture	3
SAG	310	Cultural Perspectives on Sustainability (Satisfies Gen Education X)	-
SAG	397	Apprenticeship in Sustainable Agriculture	3
SAG	490	Integration of Sustainable Agriculture Principles	3
SUB-TOTAL 87			9
SPECIALTY SUPPORT			
Students must declare one program track and complete a minimum of 12 hours from approved courses in this track.			21
SUB-TOTAL 108			21
FREE ELECTIVES			
As needed to achieve at least 120 credit hours			12
SUB-TOTAL 120			
TOTAL CREDITS FOR B.S. DEGREE			120

Sustainable Agriculture & Community Food Systems Undergraduate Program

Community Food Systems Track

Students must declare one track in the SAG major. At least 12 hours of must come from this single track, with 9 additional credits selected from courses in either program track, or other supporting courses at the 200-level or above, with approval by the student's academic advisor. For the Community Food Systems Track, select 12 hours from the following courses in consultation with your academic advisor. Additional coursework, including education abroad credit and special topics courses, may be appropriate to fulfill this requirement, but must be approved in advance by the student's academic advisor. All track coursework must be taken for a grade, not pass fail.

AEC 309 International Agriculture, World Food Needs and U.S. Trade in Agricultural Products (3)	CLD 480 Topics in Community: Food, Culture & Community (3)
AEC 300-005 Economics of Nonprofits (3)	DHN 318 Hunger, Food Behaviors & Environment (3)
AEC 532 Agricultural & Food Policy (3)	DHN 319 Seminar in Hunger Studies (1)
ANT 303 Topics in the Anthropology of Food & Nutrition (3)	DHN 320 Experiential Learning in Hunger Studies (2)
ANT 338 Economic Anthropology (3)	GEN 300 Food Connections: Issues in Food Systems (3)
ANT 225 Culture, Environment & Global Issues (3)	GEO 235 Environmental Management & Policy (3)
ANT 245 Food, Culture and Society (3)	GEO 316 Environment and Development (3)
ANT 375 Ecology & Social Practice (3)	GEO 431 Political Ecology (3)
CLD 401 Principles of Cooperative Extension (3)	PHI 336 Environmental Ethics (3)
CLD/SOC 420 Community Analysis (3)	SOC 363 Environmental Justice (3)
CLD 475 Topics in Non-Formal Education: An Entrepreneurial Approach to Community Education (3)	SOC/AAP 534 Sociology of Appalachia (3)

Sustainable Agriculture & Community Food Systems Undergraduate Program

Farming Systems Track

Students must declare one track in the SAG major. At least 12 hours of must come from this single track, with 9 additional credits selected from supporting courses in either program track, or other supporting courses at the 200-level or above, with approval by the student's academic advisor. For the Farming Systems Track, select 12 hours from the following courses in consultation with your academic advisor. Additional coursework, including education abroad credit and special topics courses, may be appropriate to fulfill this requirement, but must be approved in advance by the student's academic advisor. All track coursework must be taken for a grade, not pass fail.

AEN 252 Fabrication and Construction for Technical Systems (3)	ENT 300 General Entomology (3)
AEC 309 International Agriculture, World Food Needs and U.S. Trade in Agricultural Products (3)	ENT 320 Horticultural Entomology (3)
AEC 311 Livestock and Meat Marketing (3)	FOR 340: Forest Ecology (4)
AEC 316 Cooperative Management and Marketing (1)	PLS 220 Introduction to Plant Identification (3)
AEC 317 Marketing Horticultural Products (1)	PLS 336 Introduction to Viticulture: Grape Production (3)
ASC 300 Meat Science (4)	PLS 337 Introduction to Enology: Wine Production (3)
ASC 325 Animal Physiology (3)	PLS/SAG 390 Agroecology (3)
ASC 340 Poultry Production (2)	PPA 400G Principles of Plant Pathology (3)
ASC 362 Animal Genetics (4)	PLS 404 Integrated Weed Management (4)
ASC 364 Reproductive Physiology of Farm Animals (4)	PLS 412 Grain Crops (3)
ASC 378 Animal Nutrition and Feeding (4)	PLS 440 Plant Propagation (3)
ASC 404G Sheep Science (4)	PLS 465 Greenhouses and Controlled Environments (3)
ASC 406 Beef Cattle Science (4)	PLS 468G Soil Use and Management (3)
ASC 408G Swine Production (2)	PLS 470G Soil Nutrient Management (3)
ASC 410G Equine Science (3)	PLS 510 Forage Management and Utilization (3)
ASC 420G Dairy Cattle Science (3)	PLS 520 Fruit and Vegetable Production (4)
	PLS 531 Field School in Crop Pest Management (2)

4. Curriculum and Artifact Map

Curriculum and Artifact Map: Individualized Degree Program in Sustainable Agriculture		Key: ○ = Introductory; ● = Intermediate; ● = Degree Level ▶ = Programmatic Assessment Component ⌘ = GCCR Assessment Component				
Learning Outcome		1	2	3	4	
Pre-major Requirements	BIO 148 Principles of Biology I	○				
	BIO 152 Principles of Biology II	○				
	CHE 104 Introductory General Chemistry	○				
	CHE 108 Introductory Inorganic, Organic, and Biochemistry	○				
	ECO 201 Principles in Economics I	○				
	GEN 100 Issues in Agriculture	○	Varies	Varies	○	
	NFS 212 Introductory Nutrition	●	○	○	○	
	Environmental Stewardship Cluster					
	ASC 382 Principles of Livestock Production	●	●	●	○	○
	PLS 366 Fundamentals of Soil Science	●		●	●	
PLS 386 Plant Production Systems	●	●	●	○	○	
Economic Profitability Cluster						
AEC 302 Agricultural Management Principles	●	●	●	●	●	
AEC 305 Food and Agricultural Marketing Principles	●					
AEC 445G Introduction to Resource and Environmental Economics	●	●				
Social Responsibility Cluster						
PHI 205 Food Ethics	●					
SOC 360 Environmental Sociology	●					
SOC 420 Community Analysis or SOC 517 Rural Sociology	●					
SAG Core Courses						
SAG 210 Introduction to Sustainable Agriculture	○, ▶	○, ▶	○, ▶	○, ▶	○, ▶	
SAG 310 Cultural Perspectives on Sustainability	●	●, ⌘, ▶	●	●, ⌘ ¹ , ▶	●, ⌘ ¹ , ▶	
SAG 397 Apprenticeship in Sustainable Agriculture	●	●	●	●	●	
SAG 490 Integration of Sustainable Agriculture Principles	●, ▶	●	●, ▶	●, ▶	●, ⌘ ²	
Major Requirements						

¹ Fulfills the written communication component of the GCCR.

² Fulfills the oral communication component of the GCCR.

Individualized Curriculum in Sustainable Agriculture
Assessment Plan
Effective 2015-2016 Academic Year
(Revised and updated, Spring 2018)

Contact: Krista Jacobsen, Director of Undergraduate Studies (SAG)
Department of Horticulture
N310C Agricultural Sciences North
Phone: 859.257.3921
Email: krista.jacobsen@uky.edu

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1. Introduction

This assessment plan is for the Individualized Undergraduate Degree Program in Sustainable Agriculture (SAG), housed in the College of Agriculture, Food and the Environment (CAFE). SAG is an interdisciplinary program, with the administrative faculty currently housed in the Department of Horticulture (Krista Jacobsen, current Director of Undergraduate Studies; Mark Williams, past Director of Undergraduate Studies) and the Department of Agricultural Economics (Lee Meyer, Curriculum Committee Chair).

The SAG Program consists of an undergraduate major (Bachelor of Science) and an undergraduate minor.

1.1. Unit Mission Statement

To provide students with a fundamental knowledge in sustainable agriculture that is grounded in a framework integrating three conceptual pillars: environmental stewardship, economic profitability, and social responsibility. Through a combination of course work and experiential learning, the curriculum prepares students for careers in production agriculture, allied industries, agricultural entrepreneurship, and public and private sector employment.

1.2. Basic Assessment Approach

The basic strategy for program level assessment is the same for all Program Learning Outcomes. We will use the SAG core courses (SAG-prefix) to generate assessment artifacts. All students (irrespective of transfer status) are required to take the SAG core courses. Formative assessments for all Learning Outcomes will be conducted in the Introduction to Sustainable Agriculture (SAG 210) course, as it is the common entry point into the curriculum. As we have a number of non-SAG majors taking this course, we will select only declared SAG majors and (self-declared) SAG minor students. Major and minor declaration is collected as self-reported information at the beginning of the semester. Summative assessment for Learning Outcomes will be conducted from course activities in advanced SAG core courses. Summative assessment of Learning Outcomes 1 and 3 will be conducted from artifacts generated in the Integration of Sustainable Agriculture Principles (SAG 490) course. SAG 490 is a senior capstone class, in which students are expected to demonstrate the ability to draw conclusions about the sustainability of farming systems and food-related businesses and non-profit organizations, based on a nuanced, interdisciplinary understanding of sustainable food and farming systems. Summative assessment for Learning Outcomes 2 and 4 will be collected from the Cultural Perspectives on Sustainability (SAG 310) course. SAG 310 examines the socio-cultural dimensions of sustainability in agriculture and food systems from a global perspective. Students are expected to conduct independent research on a global agriculture and food system topic of their choosing, and through assigned written work and oral presentations critically analyze the how the concept of sustainability is applied and practiced in global and local food systems. The Composition portion of the Graduation Composition and Communications Requirement This course meets the SAG Program Graduate Composition and Communication Requirement (GCCR).

2. Assessment Oversight, Resources

2.1. College Learning Outcomes Assessment Coordinator

Dr. Larry Grabau
Associate Dean for Instruction
Office of Academic Programs
N-6 Agricultural Sciences North
Phone: 859.257.3469
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2.2. Unit Assessment Coordinator

Krista Jacobsen
Assistant Professor
Director of Undergraduate Studies (SAG)
N310C Agricultural Sciences North
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3. Program-Level Learning Outcomes: Undergraduate Program in Sustainable Agriculture and Community Food Systems (SAG)

1. Demonstrate an understanding of the economic profitability, social responsibility and environmental stewardship components of sustainable agriculture;
2. Explain how the concept of sustainability is applied and practiced in local and global food systems.
3. Evaluate the sustainability of a site specific situation by applying an integrated, interdisciplinary understanding of sustainability in sustainable agriculture and food systems.
4. Articulate her/his own understanding of agricultural sustainability through oral and written communication.

4. Curriculum and Artifact Map

Curriculum and Artifact Map: Individualized Degree Program in Sustainable Agriculture		Key: ○ = Introductory; ◐ = Intermediate; ● = Degree Level ▶ = Programmatic Assessment Component ⌘ = GCCR Assessment Component				
Learning Outcome		1	2	3	4	
Pre-major Requirements	BIO 148 Principles of Biology I	○				
	BIO 152 Principles of Biology II	○				
	CHE 104 Introductory General Chemistry	○				
	CHE 108 Introductory Inorganic, Organic, and Biochemistry	○				
	ECO 201 Principles in Economics I	○				
	GEN 100 Issues in Agriculture	○	Varies	Varies	○	
	NFS 212 Introductory Nutrition	◐	○	○	○	
<i>Environmental Stewardship Cluster</i>						
Major Requirements	ASC 382 Principles of Livestock Production	◐	◐	◐	○	
	PLS 366 Fundamentals of Soil Science	◐		◐		
	PLS 386 Plant Production Systems	◐	◐	◐	○	
	<i>Economic Profitability Cluster</i>					
	AEC 302 Agricultural Management Principles	◐	◐	◐	◐	
	AEC 305 Food and Agricultural Marketing Principles	◐				
	AEC 445G Introduction to Resource and Environmental Economics	◐	◐			
	<i>Social Responsibility Cluster</i>					
	PHI 205 Food Ethics	◐				
	SOC 360 Environmental Sociology	◐				
	SOC 420 Community Analysis or SOC 517 Rural Sociology	◐				
	<i>SAG Core Courses</i>					
	SAG 210 Introduction to Sustainable Agriculture	○, ▶	○, ▶	○, ▶	○, ▶	
	SAG 310 Cultural Perspectives on Sustainability	◐	●, ⌘, ▶	◐	●, ⌘ ¹ , ▶	
SAG 397 Apprenticeship in Sustainable Agriculture	◐	●	●	◐		
SAG 490 Integration of Sustainable Agriculture Principles	●, ▶	●	●, ▶	●, ⌘ ²		

¹ Fulfills the written communication component of the GCCR.

² Fulfills the oral communication component of the GCCR.

Assessment Methods and Measures

4.1. Direct Assessment of Program Learning Outcomes

Learning Outcome 1: Formative assessment will be conducted through evaluation of an essay on the SAG 210 final exam. Through the course, students are introduced to economic, environmental, and social aspects of sustainability in agriculture and food systems. On the final exam they are asked to provide a nuanced, personal definition of sustainable agriculture with justification for their view. This definition provides a point at which to evaluate the students' nuanced understanding of the tri-partite nature of sustainability. Summative assessment will be conducted through final projects in SAG 490. In this course, students conduct a semester-long, independent research project focused on a topic relevant to their future career in sustainable agriculture and food systems. Students are required to produce a written report to the instructor, as well as make a presentation to an audience of their peers, interested professionals and community stakeholders. The presentation (and question and answer session with SAG faculty) will be used for the summative evaluation of Learning Outcome 1. The activities and rubrics for Learning Outcome 1 are attached in *Appendix 11A*.

Learning Outcome 2: Formative assessment will be conducted through evaluation of a course reflection activity (a small writing assignment) in SAG 210. This activity asks students to evaluate the strengths and weaknesses of models for increasing the sustainability of food systems, and to articulate how sustainability is valued in several case study models. The final papers in SAG 310 are used for summative assessment. SAG 310 final papers include case studies in sustainable agriculture and food systems in the US and abroad, and require the students to describe how sustainability is constructed in their culture and agriculture/food system. The activities and rubrics for Learning Outcome 2 are attached in *Appendix 11B*.

Learning Outcome 3: Formative assessment will be conducted through evaluation of a problem-based essay/creative writing exercise on the final exam in SAG 210. The SAG 210 final exam asks students to develop a plan that contributes to the sustainability of agriculture and food systems via a parcel of land they are to imagine they inherit. They are to use course concepts from the introductory class and their personal land ethic/motivation to create this plan. Summative assessment of Learning Outcome 3 will be conducted from a study tour taken in SAG 490. During the week-long study tour of farms and food-related businesses, and are expected to keep a journal with guided reflection questions for each stop on the tour. Student are provided questions for their journals to aid assessment, but are also encouraged to use the journaling experience for self-reflection. Student journal entries will be used for the summative assessment of Learning Outcome 3. The activities and rubrics for Learning Outcome 3 are attached in *Appendix 11C*.

Learning Outcome 4: Formative assessment of the written component will be conducted through evaluation of a problem-based essay/creative writing exercise on the final exam in SAG 210. As described above, the components of the SAG 210 final require the student articulate their understanding of sustainability in written form. Formative assessment of the oral component will be conducted by evaluation of a short (3-4 minute) persuasive speech students complete as an outcome to an issues-based learning module. The final papers and presentations in SAG 310 are used for summative assessment, and similarly require students to articulate their understanding of sustainability in written and oral presentation form. The activities and rubrics for Learning Outcome 4 are attached in *Appendix 11D*.

Direct Assessment of other Experiential Learning Courses

Apprenticeship in Sustainable Agriculture (SAG 397) is a hands-on internship experience rooted in workshop-style coursework at the University of Kentucky Horticulture Research Farm Organic Farming Unit. Students are expected to participate in a weekly 2-4 hour workshop on production aspects of farming systems, as well as an additional 200 hours of independently-scheduled work. One half (up to 100) of these hours may be completed on a participating farm or with a community-food systems organization. The other half (100 hours) must be completed working on the UK Community Supported Agriculture (CSA) program. Beyond fulfilling the required number of class hours, students will be evaluated based on their work ethic and mastery of critical agricultural skills relevant to their particular internship. Summative learning is assessed through weekly class discussion and a series of reflective essays that allow the students to present what they have learned on eight key topics related to farming production practices.

SAG students are encouraged to participate in experiential learning coursework fitting to their academic and career goals. As such, a number of students complete 395 and 399 credit as a portion of their Specialty Support (directed electives) coursework. Direct assessment methods and criteria are tailored with the individual student and their supervisor via a Learning Contract. All internship and other experiential learning (399-coursework) outcomes are evaluated through journaling activities and a quantitative commitment to complete a given number of hours with the course mentor. All independent research (395-coursework) is evaluated via a research outcome appropriate to the learning outcomes, as co-designed by the student and research mentor.

4.2. Indirect Assessment

Program-Level

At the Program-level, an exit interview will be used to determine student satisfaction with the curriculum. Comments from students are collated, and where they coalesce into a common experience, are used as a guide to make course and program changes. These interviews will be conducted yearly with graduating seniors. We will also collect the data on students' publications and conference presentations as the evidence to meet the learning outcomes.

5. Data Collection and Review

5.1. *Data Collection Process/Procedures* are outlined in Table 1, below:

Table 1. *SAG Program Learning Outcome Data Collection Process, 2015 – 2020.*

Learning Outcome	Data Collection Timeline (6.1.1)	Data Collection Method (6.1.2)	Learning Outcome Benchmarks (6.1.3)	Responsible Party for Data Collection (6.1.4)
1: <i>Formative</i>	October 2017, 2019	Electronic assignment submission via email to instructor. Paper submissions will be scanned to digitize.	Mean student score of 60% (9/15) on assessment rubric.	Krista Jacobsen, SAG 210 Instructor
1: <i>Summative</i>	May 2018, 2020	Electronic assignment submission via email to instructor.	Mean student score of 85% (12.75/15)	Mark Williams, SAG 490 Instructor
2: <i>Formative</i>	October 2016, 2018	Electronic assignment submission via email to instructor. Paper submissions will be scanned to digitize.	Mean student score of 60% (9/15) on assessment rubric.	Krista Jacobsen, SAG 210 Instructor
2: <i>Summative</i>	May 2017, October 2018	Electronic assignment submission via email to instructor.	Mean student score of 85% (12.75/15)	Keiko Tanaka, SAG 310 Instructor
3: <i>Formative</i>	December 2015, 2017	Electronic assignment submission via email to instructor. Paper submissions will be scanned to digitize.	Mean student score of 60% (9/15) on assessment rubric.	Krista Jacobsen, SAG 210 Instructor
3: <i>Summative</i>	May 2016, 2018	Electronic assignment submission via email to instructor. Paper submissions will be scanned to digitize.	Mean student score of 85% (12.75/15)	Mark Williams, SAG 490 Instructor
4: <i>Formative</i>	December 2016, 2018	Electronic assignment submission via email to instructor. Paper submissions will be scanned to digitize. Collection of oral presentation judging sheets for oral presentation.	Mean student score of 60% (9/15) on assessment rubric.	Krista Jacobsen, SAG 210 Instructor
4: <i>Summative</i>	May 2017, October 2018	Electronic assignment submission via email to instructor for written component, collection of oral presentation judging sheets for oral presentation (see GCCR section 8 for detail).	Mean student score of 85% (12.75/15)	Keiko Tanaka, SAG 310 Instructor; Mark Williams SAG 490 Instructor

6. Assessment Cycle and Data Analysis

7.1 Assessment Cycle

6.1.1. *Assessment Frequency.* Each Learning Outcome will be assessed every-other year. A table outlining the Assessment Cycle is listed below:

Learning Outcome	Academic Year Assessed (2015/2016 - 2019/2020)
1	2017/2018; 2019/2020
2	2016/2017; 2018/2019
3	2015/2016; 2017/2018; 2019/2020
4	2016/2017; 2018/2019

6.1.2. *Date for sharing results with faculty and planning improvement actions.*

The SAG Curriculum Steering Committee meets as a whole, at the beginning of each semester. Results will be shared with the Steering Committee at the Spring Semester (January/February) meeting. The committee will review the strengths and weaknesses of the previous year's assessment and develop an ad hoc sub-committee to assist the Assessment Coordinator and faculty participating in the assessment in improvement actions, as needed, based upon feedback from the UK Office of Assessment and internal curriculum discussions. At this meeting faculty will also be solicited to participate in the subsequent academic year's assessment.

6.2. Data Analysis Process/Procedures

6.2.1. *Data presentation.* Data will be presented in summary form to the Sustainable Agriculture Steering Committee, with the full data set and annual assessment report available upon request to Steering Committee members. All faculty that teach core SAG courses (SAG-prefix) are standing members of the Steering Committee. All reports and data will be made available upon request to other program-affiliated faculty.

6.2.2. *Analysis of results.* Results will be analyzed by the core group of SAG faculty participating in artifact collection, as well as ad hoc Steering Committee members engaged in the annual assessment process. These consist of a mix of social and natural scientists well-versed in data collection and management, as well as several faculty members with significant program assessment experience.

6.2.3. *Alignment of results with benchmarks.* Assessment results relate directly to quantitative benchmarks established to reflect the expectation of student mastery of foundation knowledge and critical skills as they progress through the program. Our target is that mean student scores will increase 25% from when they enter the program (formative assessments) to when they exit the program (summative assessment).

6.2.4. *Data-driven program improvements.* Data will be reviewed for making programmatic improvements at two levels. The fields of sustainable agriculture and food systems are complex and interdisciplinary. As such, our Learning Outcomes reflect the need for students to have both content knowledge in diverse subject areas, as well as the ability to communicate this knowledge in a holistic, systems context. Data (particularly below benchmark) will warrant review of specific assignments and courses used to generate assessment artifacts to determine if low scoring data are a function of students' inability to communicate these perspectives effectively.

Modifications to assignments and in-class preparation will be made accordingly. Should low scores indicate insufficient content knowledge (that is, students lack both the perspective as well as the content knowledge), then an ad hoc review committee will be established to identify relevant coursework to the Learning Outcome to seek opportunities for improvement.

6.3. *Data Review and Assessment Timeline*

Data will be reviewed at the end of each academic year (summer), any remaining analyses conducted (e.g. evaluating written artifacts by assessment rubrics, etc.), and the annual report drafted to comply with Office of Assessment deadlines in the fall semester (by October 31st). This assessment plan will be reviewed as a component of regular Program Reviews, and modified to reflect recommendations.

7. **Graduating Composition and Communication Requirement (GCCR)**

- 7.1. *Identification of GCCR Student Learning Outcome.* Learning Outcome 4, “Articulate her/hers own understanding of agricultural sustainability through oral and written communication” will be used for GCCR assessment.
- 7.2. *GCCR composition assessment plan.* The final research papers submitted to SAG 310 will be used as the artifact for assessing the composition component of the GCCR. The average enrollment for SAG 310 is 30. Each paper is written with minimum of 4,500 words excluding references, tables, figures, and appendices. A random sample of 10 papers from SAG majors and minors will be selected for evaluation. Two members from the SAG Curriculum Advisory Committee will read the selected papers to assess whether the learning outcome for the GCCR has been met. The composition component of the GCCR will be assessed every 2 years.
- 7.3. *GCCR oral component assessment plan.* The final in-class presentations in SAG 490 will be used to assess the oral communication components of the GCCR. To satisfy the communication portion of the GCCR, all students will be required to take SAG 490. Each student will be required to prepare, practice, revise and finally deliver an oral presentation describing the main semester (capstone) project in front of an audience of students in the class and other outside reviewers. The presentation will be a minimum of 10 minutes. In the year to assess the GCCR learning outcome, two members from the SAG Curriculum Advisory Committee will attend at least two of presentation sessions in order to assess a sample of oral presentations.
- 7.4. Identify clear goals, rubrics, and revision plans for GCCR implementation. The goal of the course assignments assessed for the GCCR is that the population of students assessed will obtain a mean score of 75% on Learning Outcome 4 and 75% will satisfy the GCCR Learning Outcome, that “Students will demonstrate competent written, oral, and visual communication skills both as producers and consumers of information.” The rubrics used to assess the written assignments and oral presentations are attached in Appendix 11E. Any revisions will be determined by the SAG Curriculum Advisory Committee.
- 7.5. *GCCR Student artifacts.* SAG 310 students are required to a research paper of a minimum of 4,500 words on the cultural perspective of agricultural sustainability. The research paper involves one round of draft, peer-evaluation, and rewrite. SAG 490 students must give a 10-minute presentation based on his/her capstone project. A practice presentation session is

held in the group format so as to allow students to receive feedback from their peers on the quality of their oral presentations.

- 7.6. *GCCR artifact sampling plan.* A random sample of 10 research papers from SAG 310 and 10 PowerPoint presentation files from SAG 490 will be selected.
- 7.7. *GCCR course assessment rubric.* A copy of the current SAG 310 Final Paper and SAG 490 Presentation rubrics are presented in Appendix 11E.
- 7.8. *GCCR course syllabus.* A copy of the current syllabi for SAG 310 and SAG 490 are presented in Appendix 11E.

8. Teaching Effectiveness

- 8.1. *Identify measures of teaching effectiveness.* Teaching effectiveness will be evaluated from multiple measures. Teacher Course Evaluations will be used for quantitative, formal feedback for courses and instructors. As SAG core courses maintain a relatively small classroom size (under 40), instructors have frequent opportunities to interact with students. Informal interviews/discussion with students throughout their undergraduate degree will be used to evaluate effectiveness and areas of improvement. Students will also be asked about teaching effectiveness in their exit interview. Finally, instructors of SAG core courses conduct self-reflection based upon evidence of student learning from assignments considered central to the given course.
- 8.2. *What efforts to improve teaching effectiveness will be pursued based on these measures?* Efforts to improve teaching effectiveness will be based upon the particular course and feedback received. However, we have found through utilizing these methods that methods include, but are not limited to: revision of course workload and content; diversification of instructional methods, especially efforts to augment traditional lecture structure with active learning strategies; and generally increasing opportunities for active and experiential learning opportunities, as appropriate to the course content. It should also be noted that many of the core SAG teaching faculty are actively engaged in professional teaching societies, including the Sustainable Agriculture Education Association, and the National Association of Collegiate Teachers of Agriculture. The faculty regularly attend Association conferences, which offers an opportunity to exchange best practices with colleagues around the country.

9. What are the plans to evaluate students' post-graduate success?

Post-graduate success is evaluated based surveys of SAG alumni, conducted as least every 3 years, as well as informal, regular contact with alumni (e.g. emails, phone calls). Particular attention will be paid to job placement in a position a) suited to a degree in sustainable agriculture, and b) student satisfaction with their position, will be noted. Post-graduate study and program of study will also be noted.

10. Appendices

Appendix 11A: Learning Outcome 1 Assessment Tools

Includes Final Exam from SAG 210 (Formative), Presentation Evaluation for SAG 490 Final presentations (Summative), and Learning Outcome Rubric

Appendix 11B: Learning Outcome 2 Assessment Tools

Includes SAG 210 Challenges to Community Food Systems Reflection Activity (Formative), SAG 310 Final Paper Guidelines (excerpted from SAG 310 syllabus), and Learning Outcome 2 Rubric

Appendix 11C: Learning Outcome 3 Assessment Tools

Includes SAG 490 Study Tour Journal Activity (Summative*), Learning Outcome 3 Rubric

Appendix 11D: Learning Outcome 4 Assessment Tools

Includes SAG 101 Elevator Speech Activity (Formative*, †), Learning Outcome 4 Rubric. Presentation Evaluation for SAG 490 Final presentations (Summative)

Appendix 11E: Supplemental Materials for GCCR from SAG 310 and SAG 490.

Includes Final Paper Rubric, Final Presentation Rubric, and Syllabus

*SAG 210 Final Exam provides formative written activity, presented in Appendix 11A.

†SAG 310 Final Paper and SAG 490 Presentation Rubric provides summative written activity, and is presented in Appendix 11B.

Appendix 11A Learning Outcome 1 Assessment Tools

11A.1 Formative Assessment Activity Prompt

SAG 210 Final Exam

This take home, open book exam is due upon completion of our common hour exam time, Monday, December 14th, 10 am. You are welcome to submit your assignment at any time before the due date. However, late assignments will be accepted only under extenuating circumstances. Electronic or paper submission is acceptable. Either way you submit your exam, I will email you comments and your grade prior to December 21st. This exam is worth 15 points of your final exam grade (15 points). The remaining 10 points are comprised of your Summary Activity from your Independent Research Module, which is due at the same time as this portion of your exam, although you are welcome to submit it earlier.

The Scenario

It is a beautiful, crisp fall morning in the Bluegrass. The sun is shining, the light frost is lifting from the earth, and the trees are awash in seasonal reds and golds. However, a very sad event has transpired. Your great Aunt Midge has passed away. Midge was of the last generation in your family to grow up and stay on the farm. She spent her life in her vegetable garden, tending her prized tomatoes and chasing out an errant laying hen. Her husband and brother raised tobacco, corn, and cattle, like many of their neighbors. You loved visiting their farm as a kid, running around the pastures and pens, riding on old tractors, and picking watermelons from the garden.

You pull yourself from this rich memory back into the present. You are in your Sunday best, along with your whole family, awaiting the lawyer's reading of Aunt Midge's last will and testament. After many minutes of legal mumbo-jumbo, the lawyer informs the crowd assembled that *you* will receive the deed to the farm – all 150 acres and everything on it, and just a stone's throw from Lexington where you currently reside. But there is a catch (Midge was a crafty lady). She selected you to be the future of the land because you are the only one “who gave a hill of beans about farming and the local community.” You are free to do anything with the farm (keep it, sell it, etc.) but it must be a significant contribution to the local food and/or agricultural community of the Central Bluegrass. To ensure this is the fate of the land, before you are handed the deed, you must create a plan convincing your family of the importance of your idea. This plan should be based on your knowledge of local and global agricultural issues, and the potential for your idea to be a contribution to the community. Your family is supportive, and can't wait to hear what you come up with.

The Assignment

After your experience in SAG 210 at the University of Kentucky, you have decided that not only do you want your plan to be productive and profitable; you are also keen to meet Aunt Midge's challenge to create a contribution to the agricultural and community food system of the Bluegrass. Your final assignment is to create a plan for the use of this land, specifically addressing critical environmental, economic and social issues in agriculture that are of most concern to you. In this plan, you will discuss what you will do with the land, how it will sustain your livelihood, and how it will contribute to your community. You are free to be as creative as you like and to incorporate any tools that help convey your vision (pictures, figures, tables, links, etc.).

This plan should be a minimum of 3 pages in length. The questions below are provided to help structure your plan and provide opportunities for you to reflect upon what you have learned in this class. **Each question below (in bold) is worth 4 points each, 20 points total.** You may answer these questions in any order, and you are free to elaborate beyond these questions. You will be evaluated on the thoroughness of your answers to these questions and your ability to articulate your vision for this property. Please be sure to use in-text references throughout the document and provide a reference list at the end of the document, using a standard citation format of your choice.

Note: Although this activity lends itself well to a “farm plan” type of answer, you are very welcome to think of this gift of land as capital to start a venture to build a critical component of the food system that you see is needed in our community.

Appendix 11A Learning Outcome 1 Assessment Tools

Please see the rubric on page 4 for additional information on how you will be evaluated, and please know you may always email me with questions (krista.jacobsen@uky.edu).

1. **First, assess the situation in the context of your definition of sustainable agriculture.** Describe your definition of sustainable agriculture. Then list the assets and the opportunities in our community food system based on the economic, environmental, and social aspects of our agrifood system that our most important to you. Be sure to list at least one of each. Based on where you see opportunities for improvement, what do you think our community food system is missing?
2. **Next, describe a general plan for what you will do with the land to meet the needs/opportunities described in question 1.** How will you do with the land, and why? Will you farm it? Sell it? Or another option? Please describe in words and/or pictures what you will do with the land. If you are farming, describe what you will produce and the basic production practices you will employ. Why did you choose these crops/enterprises? If you decide not to farm yourself, describe how you will use the land to further your goals. *You might think of this question as your “elevator pitch” to your family.*
3. **What are your economic goals for your project in the short- and long-term?** Discuss a particular economic issue related to our agriculture and food system that is compelling to you, and how your plan addresses will address this issue. This could be at the farm-level or the food system-level. If you are farming, please mention where will you market your products and to whom, and marketing challenges that you might encounter. If you are not farming for income-generating purposes, how will you meet your financial goals?
4. **What environmental issues in agriculture will your plan address?** Please discuss a particular environmental issue related to our agriculture and food system that is compelling to you, and how your plan addresses will address this issue.
5. **What additional resources will you utilize (mention at least 2 concepts, resources, organizations, etc. from SAG 101)?** Uncle Timmy had some basic farm equipment, such as a tractor and implements, a barn, and a few animal pens in need of repair. If you decide to farm, what additional equipment, capital, labor and technical support might you need? If you are pursuing a different venture, what kinds of financial, technical, and other resources might you need? What people, resources or agencies might provide you with these?

Good luck and have fun!

Appendix 11A Learning Outcome 1 Assessment Tools

11A.2 Summative Assessment Activity Prompt

SAG 490 *Integration of Sustainable Agriculture Principles* Final Paper Assignment

(Excerpted from SAG 490 Syllabus, and complemented with significant in-class discussion and guidance throughout the semester.)

SAG 490 Final Paper: The main semester project written assignment should be 10-12 pages in length with double spacing, 12-point font, and one-inch margins. You should start with an introduction of your project that clearly states the goals and objectives of the work. In describing your project you can use a combination of written text, pictures, figures and tables. In the main body of the document you will describe what you did (methods), and what data you took or things that you developed (results). You should conclude the document with a clear discussion of how your project addressed and integrated the three pillars of sustainable agriculture: economic profitability, environmental stewardship, and social responsibility. Grades will be assigned based on the depth and breadth of information you provide and your ability to evaluate your project from a sustainability perspective.

Appendix 11A Learning Outcome 1 Assessment Tools

11.A.3 Rubric for Learning Objective 1

Learning Outcome 1: “Demonstrate a nuanced understanding of the economic profitability, social responsibility and environmental stewardship components of sustainable agriculture.”

Evaluation Criteria	Excellent (5 points)	Very Good (4 points)	Good (3 points)	Fair (2 points)	Poor (1 point)
<p style="text-align: center;">Economic Profitability</p> <p>Student demonstrates an understanding of issues affecting economic profitability on farm, community, and food system levels</p>	Understands key points related to short term profitability while securing the economic livelihood of future generations on farm and societal levels	Understands key points related to short term profitability while considering of future generations, but missing consideration of farm or societal levels	Understands key points related to short term profitability, but missing some key considerations of farm or societal levels	Demonstrates limited understanding of key points related to profitability, future generations, and missing consideration of farm or societal levels	Does not demonstrate understanding of key points related to profitability, future generations, and missing consideration of farm or societal levels
<p style="text-align: center;">Environmental Stewardship</p> <p>Student demonstrates an understanding of the principles and practices affecting environmental quality on the farm and watershed (or global) levels</p>	Applies the principles and practices associated with improving or maintaining natural resources that are appropriate to the agroecosystems in consideration, and demonstrates mechanistic understanding of the scientific basis for these practices	Applies the principles and practices associated with improving or maintaining natural resources that are appropriate to the agroecosystems in consideration, but missing mechanistic understanding of the scientific basis for these practices	Applies select principles and practices associated with improving or maintaining natural resources that are appropriate to the agroecosystems in consideration, and missing mechanistic understanding of the scientific basis for these practices	Misses some key principles and practices appropriate to the agroecosystems in consideration, and missing mechanistic understanding of the scientific basis for these practices	Misses most key principles and practices appropriate to the agroecosystems in consideration, and missing mechanistic understanding of the scientific basis for these practices
<p style="text-align: center;">Social Responsibility</p> <p>Student demonstrates an understanding of labor, food access, community development, and equity issues associated with the farms and surrounding communities</p>	Discusses key issues and policy associated with equity, justice, and community development on relevant scales (local, regional, national, etc.), and demonstrates an understanding of causality of these issues and policies	Discusses some key issues and policy, with somewhat limited understanding of causality	Discusses limited key issues and policy, with somewhat limited understanding of causality	Discusses few key issues and policy, with limited understanding of causality	Misses most key issues and policy, with no mention of causality of underlying social issues in the agrifood system

Appendix 11B. Learning Outcome 2 Assessment Tools

11B.1 Formative Prompt for Learning Objective 2

SAG 210

Summary Activity

Challenges to local food systems reflection

Due Wednesday, October 5, 2016

These past few weeks, we have discussed marketing and food distribution opportunities and challenges with our guest speakers from the Lexington Community Food System. We toured the local cooperative grocery store. You have visited the local farmer's markets and made guided observations about the food, farmers, and consumers. The UK Community Supported Agriculture Program (CSA) Manager spoke with us about CSA's as a market model and training opportunity. Our friends at the Food Connection spoke with us about integrating support for local foods and sustainability in institutional food systems, like our UK Dining Services. Representatives from organizations addressing hunger on campus and in the greater area spoke about how waste within the food system and hunger exist side-by-side. All of these experiences are representative of the promise of new models that have emerged to address some of the challenges in building local food systems.

In this brief reflection, please address the following questions for each of the models below. You are encouraged to reference resources you may find on the web and other places, but please know you are not being judged or critiqued for your reasoning. However, please give appropriate credit for these resources through in-text references and a works cited section. Recall that these activities are merely to help you reflect on each of these speakers and think more deeply about the topics they discussed. You will be evaluated on how well you articulate your opinion/rational. A few sentences for each question will suffice.

Reflection questions:

1. What aspect of this model do you feel has the greatest promise for increasing the sustainability of local food systems? What excites you about this idea the most?
2. What do you feel is the greatest challenge to the success of this model?

Remember to answer these questions for each of these models/speakers:

- Models for direct marketing to consumers (e.g. farmer's markets)
- Models for alternative distribution systems (e.g. CSA's)
- Models of institutional support for local food systems (e.g. UK Food Connection)
- Model programs for capturing food waste and decreasing hunger (e.g. Campus Kitchens)

Appendix 11B. Learning Outcome 2 Assessment Tools

11B.2 Summative Prompt for Learning Objective 2 (Excerpted from SAG 310 syllabus, Section 2)

Research Paper: The Cultural Perspective of Agricultural Sustainability

You are required to write a research paper which examines how the perspective of agricultural sustainability is situated in particular place and time outside the United States. Using the *case study methodology*, you will collect and analyze data from one system in a non-U.S. country/society to answer the following *research questions*:

1. What unique and common ideas of agricultural sustainability defined in that system in comparison to the system with which you are familiar?
2. What key ethical and social justice issues are raised in that system?
3. What opportunities and constraints are there for making agriculture more sustainable in that country? How unique or common are they in comparison to what the system, with which you are familiar, encounter?
4. What do we learn about sustainability as a concept in the context of a global food and agricultural system, particularly in comparison to how the concept is defined in the system with which you are familiar?

Potential data includes, though are not limited to: newspaper, magazine, and academic journal articles about a particular agrifood system; economic and trade statistics available from government and international agencies; interviews with faculty and residents from your research country; websites on various aspects about that country's agriculture and food system (see below).

For the final paper, due by **5:00pm on Monday, April 29, 2019**, you need to incorporate my feedback into your research paper. The paper must be written with minimum of 4,500 words, excluding references, tables, figures, and appendices.

1. Narrative and Bibliography (Due: 2/11/19, 5:00pm): As soon as you select your case country, **first**, using one or more of World Bank, UNDP, OECD, and FAO databases, collect basic information concerning that country's population, agricultural production and trade, economy and industry, and social characteristics. Create tables and figures to summarize these data. **Second**, carry out literature search, using databases available in UK Library and start reviewing some papers. **Third**, develop a narrative that explains the topic of your paper, a tentative outline of the paper, and your goal with this research. This a short narrative (minimum of 400 words, maximum of 1,000 words) will later become a part of your final paper due on **April 29, 2019**. You must provide a list of bibliographies which you plan to use for writing this section. A worksheet will be provided for this exercise. Your bibliography must include **at least** the following:

- 3 News articles published by internationally recognized news agencies or media companies (e.g., CNN, New York Times, BBC, NPR)
- 3 In-depth reports/articles from magazines (e.g., National Geographic, New Internationalist, The Economist)
- 2 In-depth reports/articles from organizations (e.g., government agency, community-based organizations).
- 3 Distinct websites (meaning that not two web pages within a given site)
- 2 Academic journal article (must be peer reviewed)

You can also use other materials, including interviews with faculty and community members, book chapters, and films. However, these are not counted toward the minimum required materials. These must be the sources which you will read and use for your case study. This particular bibliography list can include more than what you will end up reading.

Appendix 11B. Learning Outcome 2 Assessment Tools

2. Research Paper Draft (Due: 3/15/19 at 5:00pm) and Revised Final Paper (Due: 4/29/19 at 5:00pm): You are required to submit a draft of your case study. The length of your draft should be at least 4,500 words, excluding title page, bibliography pages, tables, and figures. Because drafts will be **peer-reviewed**, it is extremely important that any extension of the due date for your draft paper must be made at least 24 hours prior to the due date. Your peer's comments and my comments will be made available to you by **March 25, 2019**. Based on comments from your peers and me, you must revise your paper and submit the final version by **April 29, 2019**. Your final paper must be at least 4,500 words, approximately 15 double-spaced pages), **excluding** references, tables, and figures.

Format Requirements

- Double-spaced, 12-point font, 1" margins all sides
- Page numbered, your name in either header or footer
- Title page with the paper title and your name. Please do not include your name in the body of the paper (must be in either header or footer, outside the margins).
- Reference pages (with any social science citation format; please see the course Canvas site for resources on reference formats and citation guidelines)

Evaluation Measures for the Final Paper

- Appreciation for diverse perspectives of sustainability;
- Critical evaluation of ethical dilemmas, conflicts, and trade-offs in the effort to make agriculture more sustainable;
- Analytical skills for data collection, analysis, and synthesis to develop own perspective on sustainability; and
- Effectiveness of communication of ideas.
- Integration of course materials

3. Peer Reviews (Due: 3/25/19 @ 5:00pm) By **March 16, 2019**, each student will receive 2 assignments for peer-review of draft papers. Peer review comments must be added to "text box" on Canvas by no later than 5:00pm on **March 25, 2019**.

Appendix 11B. Learning Outcome 2 Assessment Tools

11B.3 Rubric for Learning Outcome 2

Learning Outcome 2: “Explain how the concept of sustainability is applied and practiced in local and global food systems.”

Evaluation Criteria	Excellent (5 points)	Very Good (4 points)	Good (3 points)	Fair (2 points)	Poor (1 point)
<p style="text-align: center;">Applying Sustainability</p> <p>Addresses unique and common ideas of agricultural sustainability defined in the local and global context</p>	Explains how aspects of sustainability are valued and articulated based on cultural context, including key environmental, economic and ethical aspects of food system sustainability.	Explains how aspects of sustainability are valued and articulated based on cultural context, with limited key environmental, economic and ethical aspects missing.	Explains how aspects of sustainability are valued and articulated based on cultural context, with several key environmental, economic and ethical aspects missing.	Limited explanation of how aspects of sustainability are valued and articulated, with several key environmental, economic and ethical aspects missing.	Limited explanation of how aspects of sustainability are valued and articulated, lacking significant environmental, economic and ethical aspects.
<p style="text-align: center;">Practicing Sustainability</p> <p>Discusses unique and common opportunities and constraints for making agricultural and food systems more sustainable</p>	Addresses common and unique opportunities and constraints for increasing food system sustainability through specific examples, and discussion of how opportunities address key sustainability challenges in local and global food systems.	Addresses common and unique opportunities and constraints for increasing food system sustainability through specific examples, with some gaps in discussion of how opportunities address key sustainability challenges in local and global food systems.	Addresses common or unique opportunities and constraints for increasing food system sustainability through specific examples, with some gaps in discussion of how opportunities address key sustainability challenges in local and global food systems.	Addresses common or unique opportunities and constraints for increasing food system sustainability through specific examples, with significant gaps in discussion of how opportunities address key sustainability challenges in local and global food systems.	Limited addressing of opportunities and constraints for increasing food system sustainability, lacking specific examples and discussion of how opportunities address key sustainability challenges in local and global food systems.
<p style="text-align: center;">Situating Community Food Systems in the Global Context</p> <p>Discusses lessons about sustainability as a concept in the context of a global food and agricultural system</p>	Demonstrates ability to generalize across models of community food systems to discuss common constraints and challenges to community based food systems and sustainable agriculture in a global context.	Demonstrates ability to generalize across models of community food systems, with some gaps in discussion of common constraints and challenges to community based food systems and sustainable agriculture in a global context.	Demonstrates ability to generalize across models of community food systems, with significant gaps in discussion of common constraints and challenges to community based food systems and sustainable agriculture in a global context.	Demonstrates limited ability to generalize across models of community food systems, with significant gaps in discussion of common constraints and challenges to community based food systems and sustainable agriculture in a global context.	Demonstrates limited ability to generalize across models of community food systems, with significant global competency.

Appendix 11C. Learning Outcome 3 Assessment Tools

11C.1 Prompt for Summative Activity for Learning Objective 3

(* Please note, formative prompt is presented in Appendix 11.A.1 in the SAG 210 Final Exam)

SAG 490 *Integration of Sustainable Agriculture Principles* Study Tour Learning Assessment Assignment

Overview:

The main goal of this assignment is for you to document what you learn from the various places that we tour during our trip. As we visit each of the agricultural-related sites on the trip I would like for you to listen carefully to the presenters, observe and critique their agricultural systems and ask questions. It is expected that you will be able to reflect on the experience at each place and record your impression of what you learned.

The assignment:

For each of the agricultural sites that we visit on this trip I would like you to write a short synopsis (1-2 paragraphs maximum) of your assessment and impressions. Points you might include:

1. An overview of what they do and how they do it. This could cover the production system they use, how they integrate components, how they market, and how they interact with their community. The appropriateness of each of these elements will vary from place to place.
2. A brief discussion on how you would rate the sustainability of the site. How long have they been in business? What factors contribute to their success? Could their systems be transferrable to other places, why or why not?
3. What was at least one thing that you learned at the site?

Points will be assigned for each day of the trip as follows: there are five days and each daily written assignment will be worth 6 points, for a total of 30 points. You will be graded on the thoughtfulness and thoroughness of what you write. This assignment will be due on Friday March 22, at the beginning of our class.

Bonus points. At the end of this assignment I would like for you to write down three major things that you learned on this trip or things that were memorable. These could cover a spectrum of experiences or observations and are not just agricultural specific. 3 points.

Appendix 11C. Learning Outcome 3 Assessment Tools

11C.2 Rubric for Learning Objective 3

Learning Outcome 3: “Evaluate the sustainability of a site specific situation by applying an integrated, interdisciplinary understanding of sustainability in sustainable agriculture and food systems.”

Evaluation Criteria	Excellent (5 points)	Very Good (4 points)	Good (3 points)	Fair (2 points)	Poor (1 point)
<p>Identification of Key Issues Affecting Sustainable Agriculture and Food Systems Student demonstrates an understanding of key issues affecting economic profitability, environmental stewardship, and social justice in a site-specific application</p>	Identifies key economic, environmental and social issues in a site-specific situation, with an understanding of the causal agents of these issues within and beyond the site-specific situation.	Identifies key economic, environmental and social issues in a site-specific situation, with limited gaps, and demonstrates an understanding of the causal agents of these issues within and beyond the site-specific situation.	Identifies key economic, environmental and social issues in a site-specific situation, with some gaps, and demonstrates an understanding of the causal agents of these issues within and beyond the site-specific situation, with some gaps.	Does not sufficiently identify key economic, environmental and social issues in a site-specific situation, and demonstrates limited understanding of the causal agents.	Does not sufficiently identify key economic, environmental and social issues in a site-specific situation, and does not demonstrate understanding of the causal agents.
<p>Interdisciplinary Perspective Student demonstrates an understanding of the inter-relatedness of economic, environmental, and social factors, and can weigh their relative importance in a site-specific application</p>	Effectively justifies which said issues are the critical factors affecting the sustainability of the site, provides well-supported rationale for how said factors interact or act as drivers in the system.	Effectively justifies some key factors at the site, with some gaps, and provides well-supported rationale for how said factors interact or act as drivers in the system.	Provides some justification for key factors at the site, with some gaps, with minimal gaps in rationale for how said factors interact or act as drivers in the system.	Provides limited justification for key factors at the site, with gaps significant in how said factors interact or act as drivers in the system.	Fails to identify key factors at the site, with no discussion of their effect on the site.
<p>Causation and Generalization Student demonstrates the ability to generalize the site-application to broader issues in sustainable and food systems, at the appropriate geographic scale</p>	Demonstrates an ability to link site-specific application to other relevant sites, experiences, or generalizable theory and provides well-supported justification for the local, regional, or global level scope of their assertions.	Demonstrates an ability to link site-specific application to other relevant sites, experiences, or generalizable theory and provides well-supported justification for the local, regional, or global level scope, with some gaps.	Demonstrates an ability to link site-specific application to other relevant sites, experiences, or generalizable theory, but with gaps in justification for the local, regional, or global level scope of their assertions.	Demonstrates limited ability to link site-specific application to other relevant sites, experiences, or generalizable theory, and with gaps in justification for the local, regional, or global level scope of their assertions.	Is unable to link site-specific application to other relevant sites, experiences, or generalizable theory, and with gaps in justification for the local, regional, or global level scope of their assertions.

Appendix 11D. Learning Outcome 4 Assessment Tools

11D.1 Formative Prompt for Learning Objective 4, Oral Presentation

(* Please note, formative written prompt is presented in Appendix 11A.1, SAG 101 Final Exam; Summative prompt is presented in Appendix 11B.2, SAG 201 Final Paper and Presentation.)

SAG 210

“Can Sustainable Agriculture Feed the World?” Elevator Speech

This exercise is designed to help you synthesize your opinion on the question “Can Sustainable Agriculture Feed the World?” The answer to this question, in its various iterations (e.g. “Can organic feed the world?” etc.), is critical if the sustainable agriculture perspective is to be present in the global conversation regarding how we will continue to feed a growing human population into the future. You will likely be asked your perspective in future agriculture classes (and life in general). Rather than a writing assignment to communicate your ideas, as in previous modules, you are asked to develop a succinct (2-3 minute) verbal argument to answer this question. You might call this an “elevator speech.” Technically, and “elevator speech” or “pitch” is a brief, persuasive speech that you use to summarize a position or statement about something. In business or job hunting, they are used to generate interest in you/your work/your company/etc. in a happenstance situation in which you run into someone important. For our purposes, your elevator speech is meant to introduce your expert opinion and perspective to someone posing this question, and to open the door for further informed dialogue. As such, do not feel like you must capture every salient point in your perspective. Rather, focus on 1-2 key points that are the most important or compelling to you.

Your assignment:

Although this is a verbal assignment, it is helpful to at least draft your arguments. As such, by Wednesday November 16, have a draft outline of your response to this question. Your answer should include the following information:

- Introduction/issues summary
 - o What are the key 1-2 issues?
- Background information
 - o Provide a few sentences of information that is relevant to the aspects of your issues such that your audience has a general understanding of the facts you are using to make your argument.
- Solution
 - o Now that you have described the issues, explain under what conditions/sets of sustainable agriculture solutions we can (or cannot) feed the world with sustainable agriculture practices.
- Conclusion
 - o “Tell ‘em what you told ‘em”
- Works cited
 - o You do not need formal references for the verbal portion of this assignment, but on your outline draft I would like to see a list of sources you have used to craft your answer. Don’t forget to use in-text citations as well.

Evaluation

You will be evaluated by your peers via a “speed dating” exercise in class on Friday, November 18, where you will ask and answer this question many times. You will be given a rubric in class in the coming days to see how your peers will evaluate you.

Appendix 11D. Learning Outcome 4 Assessment Tools

11D.2 Rubric for Learning Objective 4

Learning Outcome 4: “Articulate her/her own understanding of agricultural sustainability through oral and written communication.”

Evaluation Criteria	Excellent (5 points)	Very Good (4 points)	Good (3 points)	Fair (2 points)	Poor (1 point)
<p>Demonstrates their Understanding of Agricultural Sustainability Student provide a comprehensive, interdisciplinary definition of sustainable agriculture and food systems, within and external to their personal value system</p>	<p>Student provides an interdisciplinary definition of sustainable agriculture and food systems, including environmental, economic and social aspects. Effectively provide justification for their personal definition of sustainability, and an understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.</p>	<p>Student provides an interdisciplinary definition of sustainable agriculture and food systems. Effectively provide justification for their personal definition of sustainability, with some gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.</p>	<p>Student provides an interdisciplinary definition of sustainable agriculture and food systems. Effectively provide justification for their personal definition of sustainability, with significant gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.</p>	<p>Student provides a limited definition of sustainable agriculture and food systems. Justification for their personal definition contains significant gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.</p>	<p>Student provides a limited definition of sustainable agriculture and food systems, with little context for the broader research and practice context.</p>
<p>Competency in Written Communication</p>	<p>Paper provides a thesis/central statement that is effectively developed and is supported by an adequate amount of evidence and reflection. The paper is written without spelling or grammatical errors at a level that would be expected of a college graduate.</p>	<p>Paper provides a thesis/central statement that is effectively developed, with few gaps in evidence and reflection. The paper is written with limited spelling or grammatical errors at a level that would be expected of a college graduate.</p>	<p>Paper provides a thesis/central statement that is effectively developed, with some gaps in evidence and reflection. The paper is written with limited spelling or grammatical errors at a level that would be expected of a college graduate.</p>	<p>Paper lacks a thesis/central statement that is effectively developed, with gaps in evidence and reflection. The paper is written with some spelling or grammatical errors at a level that would be expected of a college graduate.</p>	<p>Paper lacks a thesis/central statement that is effectively developed, lacks evidence and reflection. The paper has significant spelling or grammatical errors at a level that are not reflective college graduate.</p>
<p>Competency in Oral Communication</p>	<p>Presentation contains a central theme that is well supported by appropriate content; verbal elocution is understandable to target audience, and non-verbal skills command attention and are fluid and poised.</p>	<p>Presentation contains a central theme that is well supported by appropriate content; with limited gaps in verbal elocution to target audience, and limited gaps in non-verbal skills.</p>	<p>Presentation contains a central theme that has minimal gaps in supported content; with some gaps in verbal elocution to target audience, and limited gaps in non-verbal skills.</p>	<p>Presentation lacks a central theme; with some gaps in verbal elocution to target audience, and limited gaps in non-verbal skills</p>	<p>Presentation lacks a central theme; with significant gaps in verbal elocution to target audience, and significant gaps in non-verbal skills</p>

Appendix 11E. Supplemental Materials for GCCR Requirement

11E.1 SAG 201 Final Paper Rubric

SAG 310: Cultural Perspectives of Sustainability

Case Study Final Paper Rubrics

Student Name:

/50 pts

Case Country:

Criteria	Poor	Fair	Good	Very Good	Excellent
This paper addresses unique and common ideas of agricultural sustainability defined in the case country's system in comparison to the US system (Q1).	1	2	3	4	5
The paper addresses key ethical and social justice issues are raised in the case study country's system (Q2).	1	2	3	4	5
The paper addresses unique and common opportunities and constraints for making agriculture more sustainable in the case country (Q3).	1	2	3	4	5
The paper discusses the lessons about sustainability as a concept in the context of a global food and agricultural system (Q4).	1	2	3	4	5
The paper has a thesis statement, which effectively developed with the case study.	1	2	3	4	5
The paper successfully compares their home state/country and non-US cases.	1	2	3	4	5
The paper demonstrates that the student carried out an adequate amount of research for this assignment.	2	4	6	8	10
The paper is written without spelling or grammatical errors at a level that would be expected from college graduates.	1	2	3	4	5
The paper meets all the requirements for this assignment.	1	2	3	4	5

Notes:

Appendix 11E. Supplemental Materials for GCCR Requirement

11E.2 SAG 490 Final Presentation Rubric

Learning Outcome 4:

“Articulate her/her own understanding of agricultural sustainability through oral and written communication.”

Artifact No. _____

Assessor Initials. _____

Criteria 1. Demonstrates their understanding of agricultural sustainability.

- Excellent (5 points).** Student provides an interdisciplinary definition of sustainable agriculture and food systems, including environmental, economic and social aspects. Effectively provide justification for their personal definition of sustainability, and an understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.

- Very Good (4 points).** Student provides an interdisciplinary definition of sustainable agriculture and food systems. Effectively provide justification for their personal definition of sustainability, with some gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.

- Good (3 points).** Student provides an interdisciplinary definition of sustainable agriculture and food systems. Effectively provide justification for their personal definition of sustainability, with significant gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.

- Fair (2 points).** Student provides a limited definition of sustainable agriculture and food systems. Justification for their personal definition contains significant gaps in understanding of their definition within the broader context of sustainable agriculture and food systems research and practice.

- Poor (1 point).** Student provides a limited definition of sustainable agriculture and food systems, with little context for the broader research and practice context.

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Criteria 2. Demonstrates their competency in oral communication.

- Excellent (5 points).** Presentation contains a central theme that is well supported by appropriate content; verbal elocution is understandable to target audience, and non-verbal skills command attention and are fluid and poised.

- Very Good (4 points).** Presentation contains a central theme that is well supported by appropriate content; with limited gaps in verbal elocution to target audience, and limited gaps in non-verbal skills.

- Good (3 points).** Presentation contains a central theme that has minimal gaps in supported content; with some gaps in verbal elocution to target audience, and limited gaps in non-verbal skills.

- Fair (2 points).** Presentation lacks a central theme; with some gaps in verbal elocution to target audience, and limited gaps in non-verbal skills.

- Poor (1 point).** Presentation lacks a central theme; with significant gaps in verbal elocution to target audience, and significant gaps in non-verbal skills.

SAG 310-001: Cultural Perspectives on Sustainability

Mondays and Wednesdays, 3:30 – 4:45 pm

227 Charles E. Barnhart Bldg

Important Note. This course satisfies the UK CORE “Global Dynamics”. This course also partially satisfies the Composition component of the “Graduation Composition & Communication” requirement for SAG majors.

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Office Hours

Mon 12:00pm – 3:00pm

Tue, Wed & Thu by appointment only

Department of Community & Leadership Development

College of Agriculture, Food, and Environment

704 Garrigus Building

SECTION 1. COURSE OVERVIEW

Course Description

This course focuses on the social processes and cultural mechanisms that underlie everyday agricultural practices, in the U.S. and abroad. By comparing agriculture and food systems between the U.S. and other countries, the course helps students appreciate distinctiveness of each society’s effort to build agricultural sustainability and recognize the common challenges of such an effort in the context of globalized agricultural trade and food production. Prereq: SAG 210. This course comprises a portion of the Graduation Composition and Communication Requirement (GCCR) course in certain programs, and hence is not likely to be eligible for automatic transfer credit to UK.

Course Content

Sustainability is a multifaceted, highly contested concept. This course begins with two premises that: (a) sustainability does not exist in the physical world, but is an ideal, that is, a concept to work toward; and (b) sustainability is defined from our daily practices and interactions with people, plants, animals, spirits, and everything that is meaningful to us. In this class, we will focus on the social processes and cultural mechanisms that underlie everyday agricultural practices, in the U.S. and abroad. To do so, we will compare agriculture and food systems between the U.S. and other countries. Such cross-cultural comparison will help you: (a) appreciate distinctiveness of each society’s effort to build agricultural sustainability; and (b) recognize the common challenges these societies face in the effort in the context of globalized agricultural trade and food production.

This course is structured into three modules. Each module consists of readings, guest speakers, lectures, and seminar discussions. The main reading is *The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization* by Jan Douwe van der Ploeg. Supplementary readings are selected from classic sustainable agriculture literature to expose students to key authors writing on

Appendix 11E. Supplemental Materials for GCCR Requirement

cultural aspects of the sustainability movement. As part of research exercises, you are required to read some “issue” oriented articles from newspapers, magazines, reports, and electronic sources which are written for wider audience. The module on cross-cultural perspectives is organized around key challenges for agricultural sustainability. Although my lectures will bring examples from agriculture and food systems and rural economies in Asia, guest speakers will be brought in to talk about farming and agriculture in other regions of the world. In your independent research, you will delve even deeper into a culture or commodity of your choosing, and write a semester-long paper using a case study approach to draw your own cross-cultural comparisons, and present your work at the end of the semester. You are expected to come to class fully prepared, willing to take responsibilities for organizing seminar discussion and presenting original case study research to make their arguments on a seminar topic.

Learning Outcomes

By this end of this course, students will be able to:

- Explain the existence of diverse perspectives of sustainability across time (history) and place (cultures/societies);
- Develop analytical skills to investigate how agricultural sustainability is defined and practiced in a given location at a given time;
- Critically evaluate how certain social processes and cultural mechanisms shape these perspectives;
- Systematically compare the perspective of sustainability between one society/community in the U.S. and the other from non-U.S. society/country; and
- Communicate effectively through writings how diverse, often competing, perspectives of sustainability reflect on the global dynamic in which agricultural and food products are produced, distributed, and consumed in today’s world.

Required Readings

- Ploeg, J.D. van der. 2009. *The New Peasantries: Struggles for Autonomy and Sustainability in an Era of Empire and Globalization*. Abingdon, Oxon, United Kingdom and New York, USA: Earthscan.
- Other readings are available in the course Canvas site

Graduation Composition & Communication Requirement (GCCR)

This is a writing-intensive course approved to fulfill the composition component of the Graduation Composition & Communication Requirement (GCCR) for SAG majors. Prior to taking this course, you must have achieved sophomore status. To satisfy the GCCR, students must earn an average grade of C or better on the Research Paper.

Assessment

	Points	%
Narrative and Bibliography	100	10%
Non-US Case Study (Draft)	100	10%
Non-US Case Study (Peer Review)	50	5%
Non-US Case Study (3 MT Presentation)	50	5%
Non-US Case Study (Revised Final)	300	30%
Weekly Group Work (10 @ 20 pts)	200	20%
Chapter Quizzes (5 @ 20 pts)	200	20%

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Total 1000 100%

Grade	Scale	
	Points	%
A	≥ 900	≥ 90
B	800 – 899	80 - 89
C	700 – 799	70 - 79
D	600 – 699	60 - 69
E	< 599	< 60

Assessment Criteria

- A** Exceptional work, beyond expectation, which demonstrate one’s ability to effectively integrate all the required course materials and additional materials into an assignment. Written work requires little or no editorial revision.
- B** Very good work that demonstrates one’s competence in integrating all the required course materials into an assignment. Written work requires minor revisions.
- C** Acceptable work that uses most of the required course materials. Written work needs major revisions for better integration of the course materials.
- D** Poor work that uses some of the required course materials. Written work needs major revisions.
- E** Unacceptable as an assignment.

Submission of Assignments

All written assignments must be submitted to Canvas. Hard copies will not be accepted unless a prior arrangement has been made with me.

Midterm & Final Examinations

There will be NO Midterm or Final Examination for this course.

Midterm Grade Reporting

Midterm grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/registrar/calendar>).

Excusable Absences & Make-Up Policy

I do require written documentation (doctor’s note, etc.) to excuse your absence. I am strict about this policy to ensure that each student has the same set of standards in determining whether or not an absence is excused, and to help me to keep track of excused absences. In accordance with the UK’s attendance policy (S.R. 5.2.4.2), the following reasons will be accepted for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays or other church-related absences, (e) interviews for graduate/professional school or full-time employment post-graduation, and (f) other circumstances I find to be “reasonable cause for nonattendance.”

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Students with excused absences will be granted the opportunity to turn in written assignments (see “Make-Up Assignment” in the next section) and will not be penalized for their absence. However, if you miss class due to an excused absence, it is your responsibility to provide documentation and arrange for make-up deadlines within one week of your absence. Your failure to do so will result in changing your “excused absence” to “absence.” Please be proactive in your communication with me regarding absences so that mutually agreeable accommodations can be made as soon as possible.

Penalty for Absence

You are expected to attend the class. For some reasons, if you must miss the class, please contact me via e-mail or text message (859-351-9252). Points will be deducted from your grade for absences without a notification.

<u>Penalty</u>		
Number of Absences	Points Deducted	Percentage of Your Grade
1	0	0%
2	10	2%
3	20	4%
4	40	8%
5	80	16%
6	160	32%

Late Submission

All assignments must be submitted by the specified date and time. Each student can request an extension of the deadline for only one assignment. Points will be deducted from your assignment for late submission, **UNLESS** an arrangement for extension has been made between you and me at least 24 hours before the deadline. The percentages deducted from the total points of a given assignment are listed below. Please note that Saturday and Sunday will be counted toward the number of dates passed the deadline.

<u>Penalty</u>	
Number of Dates	Percentage Deducted
1 day late	5%
2 days late	10%
3 days late	20%
4 Days late	40%
≥ 5	80%

Academic Integrity

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Senate Rules 6.3.1 (see <http://www.uky.edu/Faculty/Senate/> for the current set of *Senate Rules*) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

Please note: Any assignment you turn in may be submitted to an electronic database to check for plagiarism.

The Classroom Environment

I expect civil and courteous behaviors from students both inside and outside the classroom. This course involves discussions on various ideas and practices surrounding food and agriculture, and often times you will find your beliefs called into question. This is part of the learning process, and we will all have varying opinions on how we will produce food for future generations. It is very important to me that we all work together to create a classroom environment where everyone feels comfortable to freely voice his/her opinions. This means that attacks of a personal nature or statements denigrating another will not be accepted. Additionally, please refrain from tobacco use of any kind in the classroom. It is against University policy.

Moreover, sometimes your life circumstances will force you to miss a class or delay the submission of your assignment. Whether your absence from the class or delay in the submission of an assignment is excusable or not, you need to let me know so that I will be able to suggest a necessary arrangement for you to catch-up on the work. Please be proactive about any absences or delays in assignment submission, so that we can plan accordingly. Please communicate to me via phone or e-mail that you will miss a class or that your assignment will be submitted late.

Classroom Use of Laptop & Cell Phone

I permit the use of laptop in the classroom only for in-class exercises. Please silence your cell phones in the beginning of our class, and remind your peers to do the same. If I find you using cell phones or laptops during the class period, I will ask you to leave the room immediately and you will be marked as "unexcused absent" for that class period.

Email Contacts

If you are unable to come to see me during office hours, you can receive my consultation through e-mail. However, please remember that email is an official form of communication with your instructor. When you

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send an e-mail message, please use common courtesies, such as filling out the “Subject” line, using an appropriate salutation that addresses me personally (please don’t just say “Hey”), and please include your name in the message.

Text Contacts

My cell phone number is 859-351-9252. You can send me text messages to notify your absence and schedule an appointment with me. When you send me a text message, please include your name. I will not answer a message which does not identify who is the sender. Please do NOT send me text messages on other purposes unless I initiate a text conversation and request you to respond via texts.

Accommodations Due to Disability

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (DRC). The DRC coordinates campus disability services available to students with disabilities. It is located on the corner of Rose Street and Huguelet Drive in the Multidisciplinary Science Building, Suite 407. You can reach them via phone at (859) 257-2754 and via email at drc@uky.edu. Their web address is <http://www.uky.edu/DisabilityResourceCenter>.

SECTION 2. LEARNING PLAN

Research Paper: The Cultural Perspective of Agricultural Sustainability

You are required to write a research paper which examines how the perspective of agricultural sustainability is situated in particular place and time outside the United States. Using the *case study methodology*, you will collect and analyze data from one system in a non-U.S. country/society to answer the following *research questions*:

5. What unique and common ideas of agricultural sustainability defined in that system in comparison to the system with which you are familiar?
 6. What key ethical and social justice issues are raised in that system?
 7. What opportunities and constraints are there for making agriculture more sustainable in that country? How unique or common are they in comparison to what the system, with which you are familiar, encounter?
 8. What do we learn about sustainability as a concept in the context of a global food and agricultural system, particularly in comparison to how the concept is defined in the system with which you are familiar?
- Potential data includes, though are not limited to: newspaper, magazine, and academic journal articles about a particular agrifood system; economic and trade statistics available from government and international agencies; interviews with faculty and residents from your research country; websites on various aspects about that country’s agriculture and food system (see below).

For the final paper, due by **5:00pm on Monday, April 29, 2019**, you need to incorporate my feedback into your research paper. The paper must be written with minimum of 4,500 words, excluding references, tables, figures, and appendices.

1. Narrative and Bibliography (Due: 2/11/19, 5:00pm): As soon as you select your case country, **first**, using one or more of World Bank, UNDP, OECD, and FAO databases, collect basic information concerning that country’s population, agricultural production and trade, economy and industry, and social characteristics.

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Create tables and figures to summarize these data. **Second**, carry out literature search, using databases available in UK Library and start reviewing some papers. **Third**, develop a narrative that explains the topic of your paper, a tentative outline of the paper, and your goal with this research. This a short narrative (minimum of 400 words, maximum of 1,000 words) will later become a part of your final paper due on **April 29, 2019**. You must provide a list of bibliographies which you plan to use for writing this section. A worksheet will be provided for this exercise. Your bibliography must include **at least** the following:

- 3 News articles published by internationally recognized news agencies or media companies (e.g., CNN, New York Times, BBC, NPR)
- 3 In-depth reports/articles from magazines (e.g., National Geographic, New Internationalist, The Economist)
- 2 In-depth reports/articles from organizations (e.g., government agency, community-based organizations).
- 3 Distinct websites (meaning that not two web pages within a given site)
- 2 Academic journal article (must be peer reviewed)

You can also use other materials, including interviews with faculty and community members, book chapters, and films. However, these are not counted toward the minimum required materials. These must be the sources which you will read and use for your case study. This particular bibliography list can include more than what you will end up reading.

2. Research Paper Draft (Due: 3/15/19 at 5:00pm) and Revised Final Paper (Due: 4/29/19 at 5:00pm):

You are required to submit a draft of your case study. The length of your draft should be at least 4,500 words, excluding title page, bibliography pages, tables, and figures. Because drafts will be **peer-reviewed**, it is extremely important that any extension of the due date for your draft paper must be made at least 24 hours prior to the due date. Your peer's comments and my comments will be made available to you by **March 25, 2019**. Based on comments from your peers and me, you must revise your paper and submit the final version by **April 29, 2019**. Your final paper must be at least 4,500 words, approximately 15 double-spaced pages), **excluding** references, tables, and figures.

Format Requirements

- Double-spaced, 12-point font, 1" margins all sides
- Page numbered, your name in either header or footer
- Title page with the paper title and your name. Please do not include your name in the body of the paper (must be in either header or footer, outside the margins).
- Reference pages (with any social science citation format; please see the course Canvas site for resources on reference formats and citation guidelines)

Evaluation Measures for the Final Paper

- Appreciation for diverse perspectives of sustainability;
- Critical evaluation of ethical dilemmas, conflicts, and trade-offs in the effort to make agriculture more sustainable;
- Analytical skills for data collection, analysis, and synthesis to develop own perspective on sustainability; and
- Effectiveness of communication of ideas.
- Integration of course materials

3. Peer Reviews (Due: 3/25/19 @ 5:00pm) By March 16, 2019, each student will receive 2 assignments for peer-review of draft papers. Peer review comments must be added to "text box" on Canvas by no later than 5:00pm on **March 25, 2019**.

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3.3 MT Presentation (April 15 and 17) On April 15 and 17, 2019 (one week before the dead week), you will give a 3-minute presentation about your research project, using the modified rules and formats of 3MT (3 Minute Thesis), founded by the University of Queensland. These presentations do not fulfill the communication component of the GRCCR requirement.

Weekly Group Work

Agriculture and food work is never done alone. In this course, most of the work is done as group work. Although each one of you will write your own research paper, you are expected to support each other to get research work done. This includes doing literature search, drafting the initial essay and the research report, incorporating readings into the research work.

Each week, I will assign a particular product to be developed from these group activities and submitted to Canvas. Some of the products may be related to your research work; others may be related to readings. Your participation in these activities will be evaluated on weekly basis by your peers and me. Peer evaluation criteria will focus on: (a) your preparedness (e.g., completion of assigned readings) and (b) your active involvement into the group work. During your **excused absence**, the grade for that date will not count toward your group work grade.

Quizzes

You need to complete 5 chapter quizzes. Quizzes are available on Canvas. These chapter quizzes are open book and notebook. For each quiz, you have only 25 minutes to complete and a chance to take twice (see below). The first one should be taken alone before the reading assignment is due. The second one will be taken with your group members during the class though only your individual score (the 1st one) will be recorded.

Important Notes on Submission & Feedback

Please submit all your assignments in either Word (.doc or .docx) or PDF (.pdf) format to the designated location in the course Canvas. I will block any other file formats because I cannot open them. Please do not send me your assignment as an e-mail attachment unless I request you to do so. Instead, upload your assignments to Canvas. I will grade and give you feedback on the research and writing exercise assignments and your paper draft within two weeks after the due date.

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SECTION 3. COURSE SCHEDULE (TENTATIVE)**

W k	Mondays				Wednesdays			
	Date	Topic	Reading Assignment(s)	Assignment(s) Due	Date	Topic	Reading Assignment(s)	Assignment(s) Due
1					1/9	Course Overview & Introduction: What does "sustainability" mean?	TNP Preface	
2	1/14	Context: Industrialization & Globalization	TNP Ch 1	Information Sheet (1/17)	1/16	Farming as Profession, Enterprise, & Livelihood	TNP Ch 1	Group Formation
3	1/21	NO CLASS (MLK Holiday)			1/23	Workshop 1. Literature Search GW: Literature Search		
4	1/28	Peasant, Entrepreneurial, & Capitalist Agriculture 1. GW: Bibliography Formatting	TNP Ch 2		1/30	Peasant, Entrepreneurial, & Capitalist Agriculture 2. GW: Narrative Writing	TNP Ch 2	Group Ex 1
5	2/4	Repeasantization: Catacaos 1. GW: Quiz Ch 1 & 2	TNP Ch 3	Quiz Ch 1 & 2	2/6	Repeasantization: Catacaos 2. GW: Peasantry?	TNP Ch 3	Group Ex 2 Narrative & Bib (2/11)
6	2/11	Food Empire: Parmalat GW: Food Empire?	TNP Ch 4		2/13	Guest Speaker GW: Food Empire?	TNP Ch 4	Group Ex 3
7	2/18	Peasant vs. Entrepreneur 1. GW: Quiz Ch 3-4	TNP Ch 5	Quiz Ch 3 & 4	2/20	Peasant vs. Entrepreneur GW: Research Progress	TNP Ch 5	Group Ex 4
8	2/25	Repeasantization: Europe GW: Repeasantization Europe vs. US	TNP Ch 6		2/27	Repeasantization: Europe GW: Repeasantization Europe vs. US	TNP Ch 6	Group Ex 5
9	3/4	Territorial Cooperatives GW: Quiz Ch 5-6	TNP Ch 7	Quiz Ch 5 & 6	3/6	Workshop 2. Peer Reviews GW: Peer Reviews	TNP Ch 7	Draft (3/15)
10	SPRING BREAK (3/11-15)							
11	3/18	Empire and Science GW: Draft paper updates	TNP Ch 8		3/20	Empire and Science GW: Draft paper updates	TNP Ch 8	Group Ex 6
12	3/25	Empire, Food, and Farming GW: Quiz Ch -8	TNP Ch 9	Quiz Ch 7 & 8 Peer Review (3/25)	3/27	Empire, Food, and Farming GW:	TNP Ch 9	Group Ex 7
13	4/1	The Peasantry Principle 1. GW: Quiz Ch 9 & 10	TNP Ch 10		4/3	Workshop 3. 3MT Presentations		Group Ex 8
14	4/8	The Peasantry Principle 2. GW: Usefulness of concepts	TNP Ch 10	Quiz Ch 9 & 10	4/10	Guest Speaker		Group Ex 9
15	4/15	3MT Presentations GW: Evaluating 3MTs			4/17	3MT Presentations GW: Evaluating 3MTs		Group Ex 10
16	4/22	Conclusions & Reflections			4/24	NO CLASS*		
17	<i>Final Exam Week**</i>							

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SUSTAINABLE AGRICULTURE (SAG) 490 ***INTEGRATION OF SUSTAINABLE AGRICULTURE PRINCIPLES***

Time and Place

Fridays, 1:00-3:30, Ag Science North room S221.

Additional time outside of the required class period will be needed to fulfill some of the objectives in this class.

Instructor

Dr. Mark Williams

Department of Horticulture

N-322-D Agriculture Science North

Office phone: 257-2638

mark.williams@uky.edu

Office hours by appointment

Course Description

This course provides an intensive opportunity for students to integrate critical aspects of sustainability into a semester-long project. The project will involve research, design, and implementation phases, and students will present their work in both written and oral forms. This class will also allow students to gain a deeper understanding of a range of topics related to sustainable agriculture through field trips to local agriculture and food system entities, and hands-on workshops where skills and techniques are learned. Field trip and workshop topics will be determined by the students and instructor at the beginning of the semester. Additionally, students will gain first-hand experience in sustainable agriculture by taking a spring break study tour to visit exemplary agriculture sites in a region of the United States. This course comprises a portion of the Graduation Composition and Communication Requirement (GCCR) course in certain programs, and hence is not likely to be eligible for automatic transfer credit to UK. A course fee is required, as indicated by notification during course registration.

Prereq: Senior standing in the College of Agriculture, Food, and Environment, SAG 210, SAG 310, SAG 397, and completion of CIS/WRD 110 and 111.

Learning Objectives

After completing this course students should be able to:

1. Research, design, and plan an agricultural system in a way that optimizes the sustainability of the system.
2. Identify and explain the critical factors needed to be successful in agricultural production.
3. Use written and oral presentations to provide a broad perspective of how the components of sustainable agriculture are integrated in a range of agricultural-related systems.

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Required Materials

There are no textbooks required for this course. Reference materials and readings will be provided during class.

Graduate Composition and Communication Requirement (GCCR) Requirement

This course provides partial GCCR credit for the Sustainable Agriculture and Community Food Systems (SAG) major. This course (SAG 490) is used to fulfill the oral communication component of the GCCR. SAG 310 (Cultural Perspectives on Sustainability) is used to fulfill the composition portion of the GCCR. In order to receive GCCR credit for this course, students must present a formal oral (spoken) presentation that is a minimum of 10 minutes in length. This assignment should demonstrate the student's understanding of agricultural sustainability through oral presentation of their final project in this capstone course. Students will go through the process of practicing their presentation, receiving feedback, and revising the presentation prior to presenting their final presentation to a group of SAG faculty conducting annual GCCR and programmatic assessment. According to the University Senate Guidelines, students must earn a grade of C or higher on all formal assignments to pass the course, and any major assignment that receives a D or below must be revised to reflect competency and resubmitted (the instructor may limit the number of revision attempts and set time restrictions on revisions). This requirement can be completed only after you have completed 30 credit hours towards your degree. You must earn an average grade of C or better in the course in order for it to count as fulfilling GCCR.

Course Assignments and Description

1. Attendance	15 points
2. Study Tour Participation	15 points
3. Written Assignments	180 points
4. Oral Presentations	40 points
Total points	250 points

1. Attendance Policy

Because active participation counts in the grade, attendance is absolutely required. Each unexcused absence will result in a 1-point reduction in the final semester grade. For information on what constitutes an excused absence and required verification, see the "Additional Course Policies" section of this syllabus. **If students cannot attend class regularly, they should consider dropping the course.**

2. Study Tour Participation

Participation and appropriate behavior on the spring trip will contribute 15 points towards the final grade. This grade will be determined by the instructor.

3. Written Assignments

There will be four written assignments:

1. The outline of the main project will contain a brief overview of the project, as well as a representation of how the project will be organized and presented. This assignment will be worth 20 points.

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2. Three times during the semester you will be asked to write a one-page summary of what you learned from that days class experience. These summaries will be worth 10 points each and will be due at the beginning of the next class period.
3. A travel log will be kept during the study tour that will include answering questions designed to assess the learning experience. This will be evaluated by the instructor and will be worth 30 points. This will be due at the beginning of the first class following spring break.
4. A written document describing the processes used to develop the main semester project is required at the end of the semester. A grading rubric and examples of past student projects will be distributed in advance of the due date. This assignment will be worth 100 points.

The main semester project written assignment should be 10-12 pages in length with double spacing, 12-point font, and one-inch margins. You should start with an introduction of your project that clearly states the goals and objectives of the work. In describing your project you can use a combination of written text, pictures, figures ad tables. In the main body of the document you will describe what you did (methods), and what data you took or things that you developed (results). You should conclude the document with a clear discussion of how you project addressed and integrated the three pillars of sustainable agriculture: economic profitability, environmental stewardship, and social responsibility. Grades will be assigned based on the depth and breadth of information you provide and your ability to evaluate your project from a sustainability perspective.

4. Oral Presentation

An oral presentation describing the main semester project will be given at the end of the semester. This presentation will be a minimum of 10 minutes long and will be assessed by the students from this class and other outside reviewers. The presentation will be assessed as follows:

- Understanding: Is knowledge of the area demonstrated? Are information and evidence accurate, appropriate, and relevant? Are ideas logically and convincingly developed?
- Clarity: Are major points clearly presented? Is the speaker well versed in the material?
- Completeness: Are major points included, i.e., no points are missing?
- Organization: Does the introduction provide an overview of the presentation? Are main points in the right order? Are main points connected to each other coherently? Are details relevant and concise? Is the conclusion a good summary of the presentation?
- Delivery: Is eye contact effectively established with the audience? Are visual aids used effectively to reinforce ideas without creating distractions? Are questions raised being answered satisfactorily? Is the length of presentation appropriate with the allotted time?

The oral presentation will be practiced in-class in front of small (3-4 students) groups, and written feedback will be provided to guide the revision process.

Course Grading

90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	E

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (<http://www.uky.edu/registrar/calendar>).

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Class Schedule

Date	Topic
Jan 12	Introduction
19	Identification of class topics, discussion of main project assignment
26	Identification of main projects by each student
Feb 2	Field trip (TBA, based on student-directed class topics)
9	Field trip (TBA)
16	Workshop (TBA, student-directed class topics)
23	Outline of the main project is due
March 2	Field trip (TBA)
9	Overview of study tour and assignment
12-16	Spring Break Study Tour
23	Workshop (TBA)
30	Oral presentation practice session and feedback
April 6	Workshop (TBA)
13	Field trip (TBA)
20	Field trip or workshop (TBA)
27	Oral Presentations of main projects
May 3	Main project written documents due

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Additional Course Policies

Excused Absences

Students need to notify the professor of absences prior to class when possible. *Senate Rules 5.2.4.2* defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, (e) interviews for full-time job opportunities post-graduation and interviews for graduate or professional school, and (f) other circumstances found to fit “reasonable cause for nonattendance” by the professor. Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Two weeks prior to the absence is reasonable, but should not be given any later. Information regarding major religious holidays may be obtained through the Ombud (859-257-3737, <http://www.uky.edu/ombud/excused-absences>).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused) per University policy.

Per *Senate Rule 5.2.4.2*, students missing any graded work due to an excused absence are responsible: for informing the Instructor of Record about their excused absence within one week following the period of the excused absence (except where prior notification is required); and for making up the missed work. The professor must give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Verification of Absences

Students may be asked to verify their absences in order for them to be considered excused. *Senate Rule 5.2.4.2* states that faculty have the right to request “appropriate verification” when students claim an excused absence because of illness, or death in the family. Appropriate notification of absences due to University-related trips is required prior to the absence when feasible and in no case more than one week after the absence.

Academic Integrity

Per University policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the University may be imposed.

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expression. In cases where students feel unsure about a question of plagiarism involving their work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording, or content from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism.

Plagiarism includes reproducing someone else's work (including, but not limited to a published article, a book, a website, computer code, or a paper from a friend) without clear attribution. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work, which a student submits as his/her own, whoever that other person may be. Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student, and the student alone.

When a student's assignment involves research in outside sources or information, the student must carefully acknowledge exactly what, where and how he/she has employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an appropriate indication of its origin. Making simple changes while leaving the organization, content, and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas, which are so generally and freely circulated as to be a part of the public domain.

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