

## USG ACADEMIC PROGRAM PROPOSAL

**Institution:** University of Georgia

**Date Completed at the Institution:** February 20, 2018

**Name of Proposed Program/Inscription:** Agricultural Leadership, Education, and Communication (Ph.D.)

**Degree:** Doctor of Philosophy

**Major:** Agricultural Leadership, Education, and Communication

**CIP Code:** 01080101

**School/Division/College:** College of Agricultural and Environmental Sciences

**Department:** Agricultural Leadership, Education, and Communication

**Anticipated Implementation Date:** Fall 2019

**Requesting Differential Tuition Rate**       Yes<sup>1</sup>     No

**Delivery Mode (Check all that apply):**

On-campus, face-to-face only	X
Off-campus location, face-to-face only (specify the location):	
Online Only <i>If this program will be offered online, within two weeks after Board approval, the USG institution must upload requisite information into Georgia ONmyLINE using the institutional PDA account. See Appendix II for the specific questions involved for Georgia ONmyLINE.</i>	
Combination of on-campus and online (specify whether 50% or more is offered online for SACSCOC)	
Combination of off-campus and online (specify whether 50% or more is offered online for SACSCOC)	
Hybrid, combination delivery, but less than 50% of the total program is online based on SACSCOC	
Contractual Location (specify the location and timeframe/start and end dates):	

**<sup>1</sup> All documents and forms requesting a differential tuition rate must be submitted to the Office of Fiscal Affairs prior to Academic Affairs Review of the Degree Proposal.**

- 1) **Forecast:** If this program was not listed on one of the past two-year academic forecasts, provide an explanation concerning why it was not forecasted but is submitted at this time.

This program was submitted with the 2018-2019 Academic Forecast.

- 2) **Academic Framework:** Within the context of strategic planning of all resources and divisions within short-term and long-term perspectives, provide a narrative that explains campus leadership review and attention to newly institutionally approved programs within the last four years, low-producing programs, and post-approval enrollment analyses prior to approving the proposed program for submission to the system office.

The Office of Instruction reviews newly institutionally approved programs, low-producing programs, and post-approval enrollment to monitor and assess future viability of all programs.

- 3) **Rationale:** Provide the rationale for proposing the new academic program. (*In other words, does the state need the program; should your institution offer the program; and can your institution develop and implement the program.*)

The Department of Agricultural Leadership, Education, and Communication (ALEC) at UGA develops leaders with multidisciplinary skills to engage in emerging challenges related to food, environmental, and social systems. ALEC promotes food, environmental, and social sustainability through experiential education to empower communities toward food security, agricultural, and environmental sustainability through an interdisciplinary curriculum encompassing leadership, education, and communication.

ALEC prepares agricultural educators who teach youth and adults using formal and non-formal methods in a variety of contexts in and about food, fiber, and natural resource systems (*Agricultural Education* focus area); prepares agricultural communicators to disseminate information in agribusiness, government agencies, educational and non-profit centers and institutes, and media outlets (*Agricultural Communication* focus area); and creates and disseminates knowledge concerning the educational process in agricultural leadership, education, and communication through research and development by inspiring change to benefit human and natural environments (*Environmental Education* and *Extension Education* focus areas). The entire curriculum also prepares doctoral students to serve as leaders and change champions in ALEC-related disciplines by integrating leadership theory throughout the degree program.

ALEC offers two Bachelor of Science in Agriculture degrees in Agricultural Education and Agricultural Communication and one Master of Agricultural and Environmental Education degree. Building upon UGA's 2020 strategic plan, *Building on Excellence*, the proposed ALEC Ph.D. integrates university, college, and departmental goals, including *Strategic Direction II: Enhancing Graduate and Professional Programs*, by proposing a doctoral program to meet the need for more highly qualified professionals in agricultural and environmental professions.

UGA ALEC is well-positioned to capitalize on an unmet need for Ph.D. degree holders in ALEC-related disciplines. The Southeastern region of the United States produces the largest number of ALEC-related master's degrees in the country, with 139 degrees conferred in related fields in 2013 (Hanover Report, 2015). The high level of master's degree completions combined with low competitive saturation in the region, with only the University of Florida offering a residential Ph.D., suggests that an ALEC Ph.D. will address the unmet demand for doctoral programs in the region. In addition, our proposed focus areas in Extension Education and Environmental Education at the Ph.D. level are rare nationally (Hanover Report, 2015).

The Hanover Research Group conducted a market analysis in February 2015 to determine the market for a doctoral program in ALEC at UGA. Student demand and labor market demand were used to analyze the potential viability for an ALEC Ph.D. and potential areas for specialization for the proposed doctoral program. Findings indicated that an ALEC doctoral program would enable UGA to capitalize on a current unmet demand for doctoral programming in the combined areas of agricultural leadership, education, and communication. Specifically, the post-secondary agricultural education-related field is expected to grow by over 30% in Georgia between 2012 and 2022, with a teacher shortage projected in the next ten years.

In addition, the Hanover Report (2015) found that the demand for leadership education and environmental education specifically are expected to increase in the coming years. The report stated, "An agricultural leadership Ph.D. program would be uniquely situated to prepare students not only for academic jobs but also for leadership roles in industry and government" (p. 4). In fact, the southeast region was responsible for nearly one-third of all ALEC-related Master's degrees awarded between 2009 and 2013. The Hanover Report suggested that this trend indicates a large potential market for a Ph.D. program at the University of Georgia. National employment projections indicate a nearly 15% increase in demand for Ph.D.'s in ALEC-related disciplines between 2012 and 2022. The ALEC Ph.D. is prepared to meet this demand.

- 4) **Mission Fit and Disciplinary Trends:** Description of the program's fit with the institutional mission and nationally accepted trends in the discipline (explain in narrative form). If the program is outside the scope of the institutional mission and sector, provide the compelling rationale for submission.

UGA prepares graduates to engage in solving global challenges such as food insecurity and increasing climate variability through a diverse curriculum, including physical, biological, medical, and social sciences. UGA aims to cultivate an appreciation for cultural diversity needed for an edified and informed populace. The College of Agricultural and Environmental Sciences (CAES) is one of 17 colleges at UGA, which was established in 1859 as the state's land- and sea-grant university. CAES offers 22 majors, 17 minors, and 30 graduate programs. CAES's vision is to "seek, verify and apply knowledge related to agriculture and the environment, and to disseminate this knowledge through student education and public outreach programs" (Strategic Plan, 2013). To accomplish its mission, Dean Pardue identified teaching as a priority area and is committed to creating a "culture of support for students in and out of the classroom – excellence in teaching, advising, placement, and out-of-the classroom opportunities for students" through bachelors, master's, and doctoral degree programs. Dean Pardue has

prioritized college-wide curricular requirements, interdepartmental curricula, globalization, increasing the diversity of the student body, involving undergraduates in research experiences and internships, interdisciplinary teaching, and distance education as strategies for instructional excellence. Focus areas of the CAES strategic plan lead with creating sustainable food systems that include consideration for environmental, social, and economic growth through genetics, breeding, genomics, food, health and safety, natural resource management, and production and marketing. The proposed ALEC Ph.D. will address the need expressed in the strategic plan using an interdisciplinary approach to preparing professionals to educate the public in and about agriculture, communicate with the public to increase scientific and agricultural literacy, and extend the land- and sea-grant university mission through environmental and Extension education focus areas.

### **Nationally Accepted Trends and Standards in the Discipline**

The ALEC Department is comprised of twelve tenure-track graduate faculty members representing expertise in agricultural education teacher preparation (AGED), agricultural communication (AGCM), agricultural leadership (ALDR), environmental education (ENED), and agricultural Extension education, domestic and international (EXED). This composition of expertise is consistent with ALEC programs nationwide. However, UGA's ALEC department brings a rare, but relevant, addition of environmental education to the graduate curriculum. This combination of disciplinary areas in a single department lends itself to the potential for a unique doctoral program that will meet the rapidly evolving and diverse needs of ALEC professions nationwide.

The 2016 *American Association for Agricultural Education (AAAE) National Research Agenda* identified various research priority areas that spanned the disciplinary areas within the ALEC professions. Priority areas included: public and policy maker understanding of agriculture and natural resources; new technologies, practices, and product adoption decisions; a sufficient scientific and professional workforce that can address the challenges of the 21st century; meaningful and engaged learning in all environments; efficient and effective agricultural education programs; vibrant, resilient communities; and addressing complex problems (Roberts, Harder, & Brashears, 2016). The proposed ALEC doctoral program will develop professionals who are equipped to tackle these six key priority areas from a variety of theoretical perspectives.

Beyond the agricultural leadership, education, and communication professions, land-grant universities across the nation have been challenged to address various agricultural and environmental issues. The grand challenges identified include enhancing sustainability, competitiveness, and profitability of US food and agricultural systems; adapting to and mitigating the impacts of climate variability on food, feed, fiber, and fuel systems in the US; supporting energy security and the development of the bio economy from renewable natural resources in the US; providing global leadership to ensure a safe, secure, and abundant food supply for the world; improving human health, nutrition, and wellness of the US population; heightening environmental stewardship through the development of sustainable management practices; and strengthening individual, family, and community development and resilience (Association of Public and Land-grant Universities, 2010). Each of these issues has a social and behavioral science component that will be addressed in the doctoral program to prepare

graduates to make significant contributions toward solving the grand challenges facing humanity.

**5) Description and Objectives:** Program description and objectives (explain in narrative form).

The proposed ALEC Ph.D. program stands out from other programs nationally for its emphasis on interdisciplinary education, a UGA strategic priority for graduate education. Students will integrate emerging issues in agricultural and environmental education within their respective foci. Another strategic priority in graduate education is to provide and promote additional opportunities for international experiences (education, research, and service-learning). The international Extension Education focus area will attract international students and increase the diversity of our student population.

According to UGA's Strategic Direction III: Investing in Research Excellence at UGA, the Ph.D. program will better position the ALEC department to grow its research capacity and rigor, increasing capacity to compete for external funding and participate in complex, interdisciplinary, and multi-institutional grants with colleagues nationwide. Strategic Direction IV: *Serving the Citizens of the State of Georgia and Beyond* allows ALEC Extension efforts to meet the public service division of UGA by preparing students to further enhance public service outreach and will serve as a laboratory for experiential and service-learning courses while providing opportunities for research. The Ph.D. program encompasses links with K-12 public education, agricultural commodity groups, state and federal organizations, and public service non-profit organizations.

The proposed Ph.D. program in ALEC is designed to prepare graduates for both academic and non-academic careers. The degree requires a total of 45 hours of coursework and research hours and provides all doctoral students with a common set of core competencies and content areas (12 hours, referred to as the "common core"), while allowing students to specialize in one of four focus areas (12 hours). The focus areas are: 1) Agricultural Education (AGED), 2) Agricultural Communication (AGCM), 3) Environmental Education (ENED), or 4) Extension Education (EXED) with either a domestic or international concentration. Leadership and service learning theory and practices are interwoven throughout the curriculum. Within these four foci, doctoral students will become intellectual and programmatic leaders within their respective disciplines.

The common core curriculum (12 hours) will ensure that all doctoral students have the same foundational theoretical knowledge-base in six key constructs that unify our multi-disciplinary department: 1) teaching and learning theory, 2) influencing change and change theory, 3) program development and evaluation, 4) communication theory, 5) global agricultural and environmental issues, and 6) advanced formal and non-formal teaching methods. These six common core key constructs were identified following a comprehensive review of the literature and with input from ALEC faculty nationwide. Students will also complete 12 hours of coursework related specifically to their focus area (AGED, AGCM, ENED, or EXED), 12 hours of quantitative and qualitative research methods, three hours of research, and six hours of dissertation for a total of 45 hours to complete the degree.

Along with preparation in the common core, doctoral students will be exposed to emerging issues and grand challenges specific to their respective foci, such as climate variability, food insecurity, and social sustainability within the context of growing global populations, food shortages, and environmental degradation. Because employers report doctoral students have high levels of subject matter expertise but often lack in team and process skills, our graduates will possess “skills related to working in a team environment, creating and delivering presentations, business acumen (skills necessary to deliver outcomes on schedule and on budget), project management, and the ability to discuss technical issues with nontechnical individuals,” known as leadership and service-learning skills (Council of Graduate Schools and Education Testing Service, 2012, p. 10). Figure 1 provides a graphical representation of the common core, the four focus areas, and the minimum research requirements for the Ph.D. program.

### **Goals/objectives of the Ph.D. program**

Upon graduation, successful doctoral students will be able to:

1. Effectively design and conduct quantitative and qualitative research studies aimed at addressing emerging domestic and global issues related to food insecurity, environmental degradation, and social sustainability;
2. Successfully teach and evaluate learning in formal and non-formal environments; and
3. Plan, implement, and evaluate impactful educational programs targeting specific clientele needs in the agricultural and environmental sciences.

### **Expected Competencies of Ph.D. Graduates for the Four Foci According to National Accrediting Agencies and Professional Organizations for ALEC Disciplines**

#### **Agricultural Education (AGED)**

The Agricultural Education profession is a sub-discipline of the broader social science research field examining the current gaps between the agriculture, food, and natural resource industry and the general public (Roberts, Harder, & Brashears, 2016). The research conducted by ALEC faculty examines interdisciplinary topics such as urban agriculture, the local food movement, international agriculture, and food insecurity. The teacher preparation profession is guided by several organizations, one being the Association for Teacher Education (ATE). In 2000, the ATE developed a set of competencies needed by all teacher educators to effectively prepare the next generation of teachers.

1. Model teaching that demonstrates content and professional knowledge, skills, and dispositions reflecting research, proficiency with technology and assessment, and accepted best practices in teacher education.
2. Apply cultural competence and promote social justice in teacher education.
3. Engage in inquiry and contribute to scholarship that expands the knowledge base related to teacher education in the agricultural and environmental sciences.
4. Inquire systematically into, reflect on, and improve their practice and demonstrate commitment to continuous professional development.

5. Provide leadership in developing, implementing, and evaluating teacher education programs that are rigorous, relevant, and grounded in theory, research, and best practice.
6. Collaborate regularly and in significant ways with relevant stakeholders to improve teaching, research, and student learning.
7. Serve as informed, constructive advocates for high quality education for all students.
8. Contribute to improving the teacher education profession through rigorously developed supervised agricultural experiences with students.
9. Contribute to creating visions for teaching, learning, and teacher education that take into account such issues as agricultural technology, systemic thinking, and world views related to agricultural production and public perceptions.

### **Agricultural Communication (AGCM)**

Students selecting the Agricultural Communication foci area will complete 12 hours of coursework aligned with key competencies supported by professionals (Smith, Sitton, & Ramsey, 2012).

1. Knowledge of policy and current events in agriculture, science literacy and knowledge.
2. Global issues and media influence impacting food, agriculture, and communications.
3. A thorough understanding of how agricultural communications is connected to other disciplines.
4. Communication theories and their implications in research.
5. Understanding the public opinion process.
6. Rhetorical theory and criticism as it relates to agriculture and environmental sciences.
7. Knowledge in photography, campaign development, emerging technology, design principles, social media, and video and audio production.
8. Knowledgeable in evaluation methods, qualitative and quantitative methodologies, and scale development.
9. Grant seeking and writing abilities.
10. Strong abilities in instructional design and university-level teaching.
11. Strong writing abilities in research, technical, scientific, journalist, and media including mastery of AP and APA writing styles.

### **Environmental Education (ENED)**

The *North American Association for Environmental Education* (NAAEE), the discipline's leading professional organization, has developed a series of national priority areas of which environmental education professionals should possess.

1. Program planning, implementation, management, and sustainability (Guidelines 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 4.1, 6.1)
2. Effective information delivery and curriculum development (environmental literacy content) (Guidelines 3.1, 3.3 and 1.3, 2.1, 3.1, 5.1)
3. Program evaluation (Guidelines 5.2, 6.1, 6.2, 6.3)
4. Community engagement (Guidelines 5.3, 6.3)

## **Extension Education (Domestic and International) (EXED)**

Graduates will have exposure to all discipline-specific competencies documented by scholars, including Liles and Mustain (2004), Maddy Neimann, Lindquist, and Bateman (2002), Ohio State University (2015), Suvedi (n. d.), Vandenburg and Foerster (2008), Lindner et al. (2003), Shinn et al. (2009), and Strong and Harder (2001) regarding mastery expectations of Ph.D. graduates in Extension Education. Issahaku (2014) found interpersonal relations, communication, personal qualities and technical knowledge dominate most competency frameworks and competency-related literature. Social, cultural, program evaluation and Good Agricultural Practices (GAP) were predictors of workers' performance. Khalil et al. (2009) reported, "Program planning, implementation and evaluation [competencies] emerged as significant predictors of performance" (p. 444) of extension agents in Yemen. Chae, Kim, and Lim (2014) found that core competencies such as research and analytical skills, interpersonal skills, strategic instruction, and agricultural extension and customer orientation are positively related to agents' performance. The Ph.D. program will address the following competencies regarding international and domestic Extension education:

1. Instructional design, curriculum development, and delivery strategies.
2. Change and technology adoption in regard to agricultural and rural development.
3. Understanding of emerging issues in international agriculture and Extension education
4. Skills to manage non-profit organizations (human resource development and community engagement).
5. Program development skills such as needs assessment and program planning, implementation, and evaluation; data collection methods and tools.
6. Communication and leadership theory and skills such as context, culture, diversity, and intercultural development.

### **Common Core Courses**

The following table lists courses comprising the common core that all Ph.D. students will complete. Regardless of the number of courses taken within each of the core competency areas, students must complete at least 16 hours of 8000-level courses to satisfy the minimum requirement for Ph.D. coursework at UGA. All courses are currently provided by the ALEC department and offered at least once annually.

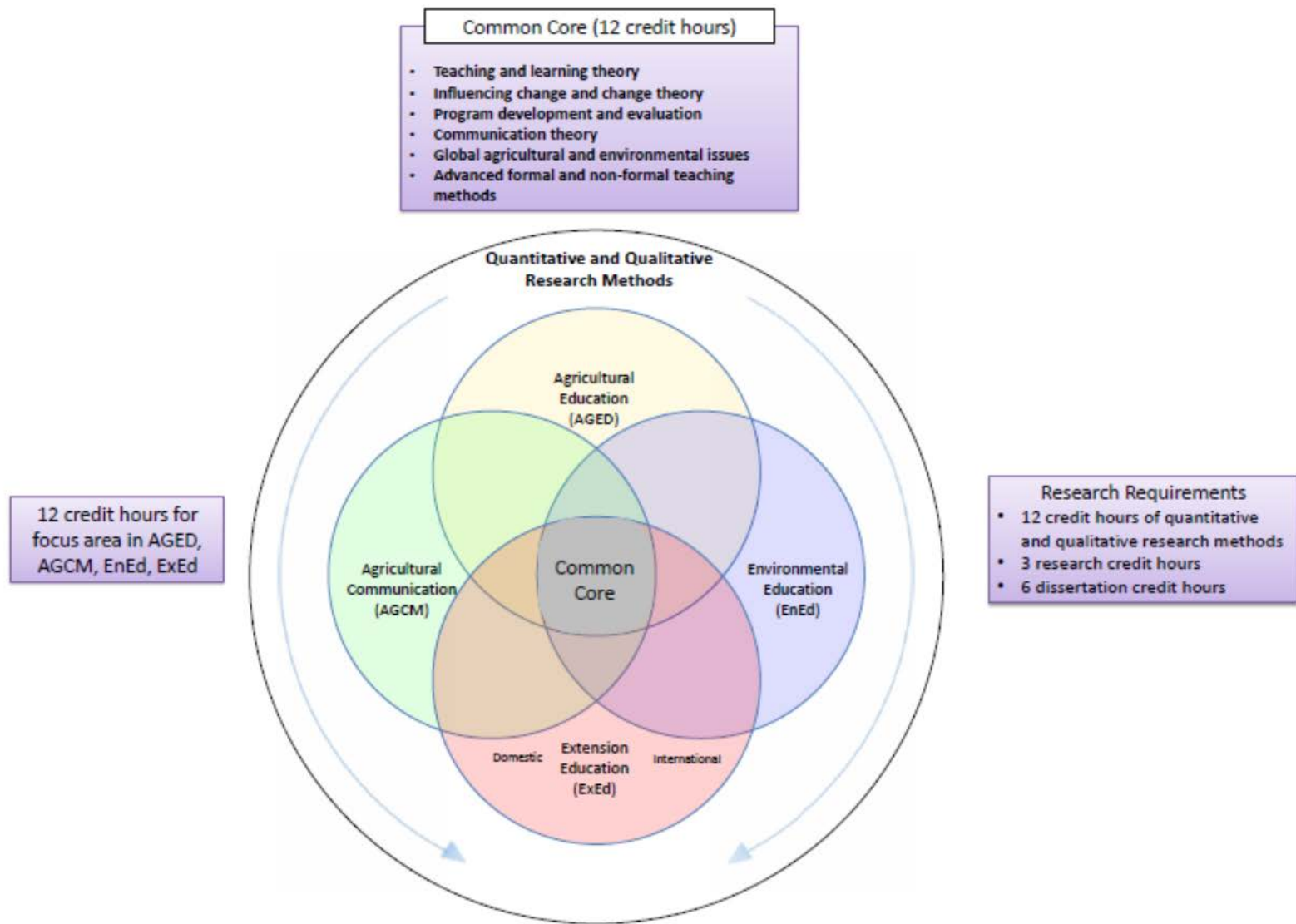
<b>Course Code</b>	<b>Course Title</b>	<b>Credit Hours</b>
ALDR 8100	Teaching and Learning Theories in Agricultural Leadership, Education, and Communication	3
ALDR 8030E	Diffusion of Innovations	3
ALDR 8150	Program Development for Agricultural Leaders	3
ALDR 7400E	Communication in Agricultural and Environmental Science	3

The table above highlights four courses addressing the foundation of the ALEC Ph.D. degree. The topics of global agricultural and environmental issues and advanced formal and non-formal



teaching methods will be interlaced throughout these four core courses which currently emphasize a global perspective for influencing change using appropriate teaching methods.

The Ph.D. program will be delivered primarily through face-to-face teaching and research experiences. Faculty resources available allow for course delivery, advising, discussions, and interactions to be available in person at the Athens campus. ALEC employs twelve tenure-track graduate faculty members and one department head. Interacting with faculty members on a regular basis is critical for Ph.D. students to learn from and become comfortable in the academic setting.



**Figure 1.** Graphical representation of the ALEC Ph.D. foci and common core requirements.

- 6) **Need:** Description of the justification of need for the program. (Explain in narrative form why the program is required to expand academic offerings at the institution, the data to provide graduates for the workforce, and/or the data in response to specific agency and/or corporation requests in the local or regional area, and/or needs of regional employers.) (A list of resources, not exhaustive, is available on the public web link along with the proposal form at: [http://www.usg.edu/academic\\_programs/new\\_programs](http://www.usg.edu/academic_programs/new_programs))

#### **Needs Met by Focus Area: Agricultural Education (AGED)**

The ALEC Ph.D. program will include a focus area for the preparation of agricultural teacher educators who are prepared to engage in both formal and non-formal educational settings and solve pressing educational issues facing our nation's public school system. The Hanover Report (2015) market analysis echoed the demand for graduates with advanced degrees in agricultural education, stating, "Agricultural education jobs in Georgia are projected to grow much faster than the national average. The postsecondary agricultural education profession is projected to grow by over 30% in the state between 2012 and 2022" (p. 4). Therefore, a need exists to develop an agricultural education-focused Ph.D. program to satisfy the growing demand for agriculture teacher educators.

The AGED focus area will prepare graduates to become experts in 1) teaching and learning theory, 2) curriculum development, and 3) teacher education. Graduates will engage in coursework and research experiences that utilize an interdisciplinary perspective to investigate emerging issues facing society, some of which are engaging urban audiences in agricultural practices and meeting the educational needs of students with rapidly changing demographics.

Graduates will be prepared to enter professional positions in academia, public school systems, curriculum development, and other formal and non-formal educational settings. Potential research topics include: effectiveness of inquiry-based instruction, assessment of classroom and laboratory knowledge acquisition and retention, effectiveness of experiential learning, teacher pedagogical content knowledge development and utilization, and the utilization of learning tools in formal and non-formal learning environments. Appendix B provides a list of published doctoral dissertation studies in the AGED focus area.

#### **Needs Met by Focus Area: Agricultural Communication (AGCM)**

The AGCM focus area provides an interdisciplinary curriculum that emphasizes the intersections of three key areas: 1) media and technology; 2) agricultural, food, and environmental issues; and 3) diversity among various audience types. In order to bolster and secure the scholarly field of Agricultural Communication, it is essential that doctoral students graduate from this program with a command of interdisciplinary research methods and theoretical frameworks so that they can effectively address and engage in the ever-evolving and emerging issues of:

- Communication and engagement strategies
- Perceptions, expectations, and demands of diverse audiences
- Global food and social sustainability
- Intensive local food production

Graduates will be qualified for faculty positions in one of the 40 agricultural communication academic programs in the USA, as well as a variety of social science research-oriented positions within agriculture, food, and environmentally-based organizations or agencies. Agricultural Communication B.S. programs are the fastest growing segment of ALEC departments nationwide. Qualified faculty members are in short supply to meet the demand. Many faculty positions go unfilled for a lack of qualified applicants. The ALEC Ph.D. will help meet the demand for highly qualified Agricultural Communication faculty as well as industry roles through positions such as director of communications, director of publishing, marketing manager, director of research communications, and Extension specialist. Appendix B provides a list of published doctoral dissertation studies in the AGCM focus area, and more information about the demand for this major can be found in Section 5, Demand.

### **Needs Met by Focus Area: Environmental Education (ENED)**

The *North American Association for Environmental Education* (NAAEE) recently developed a series of guidelines that inform the planning, implementation, and evaluation of environmental education programs and activities. May (2000) identified disciplinary skills needed among undergraduate students pursuing teaching careers where environmental education was a key component of their job. Critical needs of successful environmental educators include teachers who exhibit an efficacious:

- Knowledge base in ecology, local culture, and teaching and learning theory
- Skills base with instructional strategies, alternative assessments, and making connections between local/global issues and curricula (May, 2000)

More recently, Vincent and Focht (2011) identified characteristics of successful environmental science-related degree programs as being those which highlight an interdisciplinary and applied focus on the link between human and natural systems. Similarly, the *National Environmental Education Advisory Council* (2015) stated the critical need for environmental education researchers who can disseminate relevant and meaningful research and evaluation findings to practitioners and administrators as well as to the general public.

The Hanover Report (2015) noted the need for a doctoral degree focusing in environmental education, stating, “Environmental Education doctoral degrees are currently primarily offered by education and environmental science departments. UGA would be one of the only universities to offer this specialization through an ALEC department” (p. 4) within the College of Agricultural and Environmental Sciences. In addition, the report noted that environmental education would serve a complimentary role to the agricultural education discipline. Specifically, “A Ph.D. in Environmental Education within the department of Agricultural Leadership, Education, and Communication at UGA would offer a unique context for approaching environmental education as an aspect of agricultural education” (p. 19).

The ALEC Ph.D. focus in ENED will prepare students to become environmental educators at the secondary and post-secondary levels through interdisciplinary coursework, research, and teaching experiences while proactively addressing emerging issues within human and natural systems. According to the North American Association for Environmental Education

(naaee.org), the discipline's leading organization, the following environmental issues require environmental education professionals to be addressed appropriately:

- Climate change
- Water availability and use
- Energy use

The ALEC Ph.D. will prepare doctoral students to provide leadership on these and other environmental issues. Additional information on these critical issues can be found at:

<https://naaee.org/our-work/programs/environmental-issues-forums/environmental-issue-guides>

Appendix B provides a list of published doctoral dissertation studies in the ENED focus area.

### **Needs Met by Focus Area: Extension Education (Domestic and International) (EXED)**

Extension educators and specialists have played, and will continue to play, a key role in working with people, communities, and institutions to address grand challenges such as poverty reduction, agricultural and environmental sustainability, food security, health and nutrition, and youth development, locally and globally. County- or state-based Extension professionals fulfill their roles through the collection, analysis, development, transfer, and co-creation of knowledge (Röling, 2004). They are adult educators employed in local, national, and international organizations such as government, non-government organizations (NGO), and for-profit or not-for-profit organizations. For decades, the challenge in the preparation of county- or state-based Extension professionals has been to balance content and technical knowledge with context and professional competencies (e.g., agricultural and health knowledge vs. communication and interpersonal skills) (Etling & Radhakrishna, 1998; Lindner, Dooley, & Wingenbach, 2003; Strong & Harder, 2011), a problem that becomes even more complex when preparing Extension professionals to work in international settings (Shinn, Wingenbach, Briers, Lindner, & Baker, 2009). Communities have very different social, historical, economic, educational, cultural, political, and environmental characteristics that are often unfamiliar to Extension agents.

Novice Extension professionals in the US usually have excellent preparation in technical skills. Employers provide sustained professional development to prepare educators for challenges in their Extension roles, such as working and communicating with people, collaborating with institutions, collecting data, analyzing situations, evaluating programs, and co-creating solutions.

Therefore, it is important to prepare Ph.D. graduates to create and implement curriculum that includes:

- Technical and professional development needs of Extension professionals throughout their careers
- Technical qualifications to execute knowledge integration

ALEC graduates will supply the demand for the growing market for county- or state-based Extension professionals and may select to concentrate on either domestic or international Extension efforts. The data provided on page 13 of this proposal highlights the local and regional demand for this degree. Appendix B provides a list of published doctoral dissertation

studies in the EXED focus area.

- 7) **Demand:** Please describe the demand for the proposed program. Include in this description the supporting data from 1) existing and potential students and 2) requests from regional industries. How does the program of study meet student needs and employer requirements in terms of career readiness and employability, requirements to enter the profession, post-graduate study, and disciplinary rigor at the level required for professional success and advanced educational pursuits? *(In other words, how does the program of study prepare students for the next step?)*

Demand for the ALEC Ph.D. program was determined by surveying (1) currently enrolled students and (2) all Georgia Agricultural Education secondary teachers.

A Qualtrics survey link was emailed to all current ALEC undergraduate students ( $n=100$ ) and Master of Agricultural and Environmental Education students ( $n=40$ ) using the departmental listserv regarding the demand for a Ph.D. in ALEC on June 20, 2016. Twenty-nine people responded to the survey for a 21% response rate. Overall, 76% of respondents ( $n=22$ ) were likely to seek a Ph.D. program in the next five years and 78% of respondents ( $n=23$ ) were likely to seek a Ph.D. program from ALEC at UGA specifically, indicating strong demand for the Ph.D. program among current students and recent ALEC graduates.

The same survey was sent to the Georgia Vocational Agriculture Teachers Association (GVATA) listserv on June 23, 2016, to assess demand among this audience. There are 400 members of GVATA. A total of 84 people responded to the survey for a 21% response rate. Overall, 77% of respondents ( $n = 65$ ) were likely to seek a Ph.D. program in the next five years and 60% of respondents ( $n = 50$ ) were likely to seek a Ph.D. program from ALEC at UGA, indicating strong demand for the degree among working professionals. We believe that it is essential for those preparing for academic careers to study in residence. Therefore, we require doctoral students to be in residence for 30 hours of the 45-hour doctoral degree. The 30-hour residence requirement meets university policy and will help doctoral students to acclimate to the academic culture and become immersed in a culture of research working closely with their major professor. Doctoral students may take up to 15 hours online of the 45-hour total degree requirement. The following table details the responses from these two populations.

Question	Response options	Frequency Current Students	Percent Current Students	Frequency GVATA members	Percent GVATA members
How likely are you to seek a Ph.D. degree in the next 5 years?	Extremely likely	11	38	22	26
	Moderately likely	4	14	21	25
	Slightly likely	7	24	22	26
	Neither likely nor unlikely	2	7	3	4
	Slightly unlikely	0	0	1	1
	Moderately unlikely	3	10	4	5
	Extremely unlikely	2	7	11	13
	Total	29	100%	84	100%

How likely are you to seek a Ph.D. program from UGA, ALEC?	Extremely likely	10	34	10	12
	Moderately likely	10	34	19	23
	Slightly likely	3	10	21	25
	Neither likely nor unlikely	2	7	10	12
	Slightly unlikely	0	0	7	8
	Moderately unlikely	2	7	4	5
	Extremely unlikely	2	7	13	15
	<b>Total</b>	<b>29</b>	<b>100%</b>	<b>84</b>	<b>100%</b>
Which of the following areas would you most likely enroll in?	Agricultural Education	14	50	65	80
	Agricultural Communication	7	25	5	6
	Environmental Education	3	11	4	5
	Extension Education - Domestic	2	7	4	5
	Extension Education - International	2	7	3	4
		<b>Total</b>	<b>28</b>	<b>100%</b>	<b>81</b>
Would you need a graduate assistantship to begin your Ph.D.?	Yes	10	36	10	12
	Maybe	13	46	25	30
	No	5	18	48	58
	<b>Total</b>	<b>28</b>	<b>100%</b>	<b>83</b>	<b>100%</b>
<p>What are your career goals?</p> <p>Note: having a Ph.D. for these types of positions is desirable and often required.</p>	<ul style="list-style-type: none"> <li>• Secondary agriculture education teacher</li> <li>• Start as a secondary agriculture education teacher, advance to college level</li> <li>• Work in agricultural education, with the FFA organization</li> <li>• Work on Georgia FFA State Staff or at a University</li> <li>• Administrator, Superintendent in public K-12 schools</li> <li>• Career, Technical, Agricultural Education (CTAE) director</li> <li>• College faculty/University Academia</li> <li>• Extension education</li> <li>• Environmental education coordination and implementation</li> <li>• Environmental education center director</li> <li>• Director of education at an accredited zoo or aquarium</li> <li>• Cooperative Extension leadership position</li> <li>• Extension specialist</li> <li>• Youth development</li> <li>• Work with USDA FAS to develop agricultural systems abroad</li> <li>• Work in educational administration at UGA</li> <li>• Agricultural communication education</li> <li>• Agricultural association management</li> <li>• NGO or a governmental organization like USAID</li> </ul>				

## Placement of ALEC Ph.D. Holders

In regard to job placement specific to ALEC Ph.D. holders, Dr. Kelsey, ALEC department head at the time, sent a request for information to the professional listserv for the *American Association for Agricultural Education* (AAAE) on June 20, 2016. The AAAE professional society encompasses the sub disciplines of agricultural education (secondary teacher preparation), leadership education, agricultural communication, and Extension education (domestic and international). AAAE members who earned an ALEC-related Ph.D. between 2010 and 2016 were asked to report their degree focus area, granting institution, and current job placement. Forty individuals responded to the survey.

Respondents received ALEC Ph.D. degrees from programs delivered face-to-face at Auburn University ( $n = 1$ ); Cornell University ( $n = 1$ ); Iowa State University ( $n = 4$ ); Louisiana State University ( $n = 1$ ); North Carolina State University ( $n = 2$ ); Ohio State University ( $n = 1$ ); Oklahoma State University ( $n = 6$ ); Purdue University ( $n = 1$ ); Texas Tech University ( $n = 4$ ); University of Florida ( $n = 8$ ); University of Missouri ( $n = 3$ ); Texas A&M University ( $n = 2$ ); Virginia Tech ( $n = 5$ ); and West Virginia University ( $n = 1$ ). One respondent earned an Ed.D. in Agricultural Education from Texas Tech University.

ALEC is a multi-disciplinary degree area. Universities offering an ALEC-related degree have various names for the degree. Respondents reported majoring in Agricultural Leadership, Education, and Communication (TAMU); Agricultural Communication, Education, and Leadership (Ohio State); Agricultural Education, Communications and Leadership (Oklahoma State); Agricultural Leadership and Community Education (VT); Agricultural Education and Communication (UF); Agricultural Education and Leadership (UM); Agricultural Communications and Education (TTU); Agricultural Education (Auburn, ISU, NCSU); Agriculture and Extension Education (LSU); Education (Cornell University); and Human and Community Development (West Virginia University).

Within the above degrees, respondents reported specializing in Extension education, environmental education, program planning and evaluation, animal science, online education, and agricultural mechanics.

All respondents reported working in a professional field related to their Ph.D. and shared the following position titles:

- Department Head, Agriculture and Home Economics Education, School of Education, Njala University, Sierra Leone, West Africa ( $n = 1$ )
- Assistant or Associate Professor, Agricultural Education (Teacher Preparation) ( $n = 15$ )
- Assistant Professor, Agricultural Communication ( $n = 7$ )
- Assistant Professor, Environmental Education, University of Georgia ( $n = 1$ )
- Assistant Professor, Specialty Livestock/Youth Education Specialist, University of Arkansas Cooperative Extension Service ( $n = 1$ )
- Assistant Professor of Science and Agriculture, University of Minnesota Extension Center for Youth Development (4-H) ( $n = 1$ )
- Assistant Professor, Extension 4-H Youth Specialist, University of North Dakota, Fargo ( $n = 1$ )



- Assistant Professor of Agribusiness, Department of Agricultural Sciences and Engineering Technology, College of Sciences, Sam Houston State University ( $n = 1$ )
- Lecturer and Agriscience Education Program Coordinator, Ohio State University ( $n = 1$ )
- 4-H Program Specialist for Youth Development, Iowa State University ( $n = 1$ )
- Assessment Postdoctoral Fellow for the assistant provost of undergraduate education at Virginia Tech ( $n = 1$ )
- Assistant Director, Instructional Technology Services, TAMU ( $n = 1$ )
- Director, Center for Experiential Learning and Career Services, Penn State ( $n = 1$ )
- Director, Equine AS degree program at UMass ( $n = 1$ )
- Director, Special Projects, Texas Tech University School of Law ( $n = 1$ )
- Assistant Director, South Carolina 4-H, Clemson University ( $n = 1$ )
- Middle School Principal, Tulsa, OK ( $n = 1$ )
- Secondary Agricultural Education Teacher, Sonoraville High School, Calhoun, GA ( $n = 1$ )
- Secondary Chemistry Teacher, San Jose, CA ( $n = 1$ )
- Program Evaluator ( $n = 1$ )

Given the variety and number of professional jobs available to ALEC Ph.D. holders, the demand for graduates is anticipated to be high. The following table displays projected trends in the demand for graduates with a Ph.D. in ALEC.

### Job Placement of Recent Ph.D. Graduates in ALEC-related Disciplines

Type/Title of Position	Number of Anticipated Position Openings	Average Starting Salary
Assistant Professor of Agricultural Education	5-10 per year nationally	9-month = \$68,121 12-month \$79,995
Assistant Professor of Agricultural Communication	5-10 per year nationally	9-month = \$68,121 12-month = \$79,995
Other ALEC-related assistant professors	5-10 per year nationally	9-month = \$68,121 12-month = \$79,995
Extension Specialist	2-5 per year nationally	9-month = \$68,121 12-month = \$79,995
Secondary Agriculture Teacher	1,462 new agriculture teachers were hired nationally in 2015 (Foster et al., 2015)	\$60,000 to \$90,000 depending on school district, years of experience, and degrees held

### Salary Estimates for ALEC Ph.D. Holders

Average salaries for ALEC faculty are reported by the *American Association for Agricultural Education* (Swortzel, 2016). The average salary for a 9-month assistant professor was \$68,121 and \$79,995 for a 12-month assistant professor in 2015. The average salary for a secondary agriculture teacher with 10 years of experience and a Ph.D. is \$82,765 (S. Mitchell, State FFA Staff North Region Director, personal communication June 22, 2016).

## National Job Placement Data From the Bureau of Labor Statistics

The US Bureau of Labor Statistics (2016) was consulted to determine demand for various occupations that ALEC Ph.D. holders may qualify for given their training. The following table lists the job title, number of job openings (in thousands) due to growth and replacements over a ten-year period (2014-2024), median annual wage, and typical education needed for entry.

<b>Job Title</b>	<b>Job openings (numbers in thousands)</b>	<b>Median annual wage, 2015*</b>	<b>Education needed for entry</b>
Management	2,586	\$115,020	Bachelor's
Advertising, marketing, promotions, public relations, and sales managers	210	\$131,670	Bachelor's
Media and communication workers	198	\$53,220	Bachelor's
**Media and communication Workers	8,800	\$45,220	Bachelor's
**Multimedia artists and animators	15,900	\$63,970	Bachelor's
** Photographers	34,500	\$31,710	Bachelor's
** Writers and authors	26,100	\$60,250	Bachelor's
Social scientists and related workers	97	\$78,520	Doctoral
Education administrators	185	\$90,970	Master's
Education, training, and library occupations	2,661	\$64,450	Doctoral
Community and social service occupations	792	\$53,660	Master's
** Postsecondary agricultural sciences teachers	2,900	\$90,780	Doctoral
Post-secondary social science teachers	550	\$84,180	Doctoral
Post-secondary vocational education teachers	33	\$54,260	Master's
Secondary agriculture school teachers with a Ph.D.		\$82,765	Doctoral
Secondary school teachers	303	\$60,270	Bachelor's
**Cooperative Extension - Farm and Home Management Advisors	2,200	\$49,190	Bachelor's, Master's

\*Median annual wage data obtained from [http://www.bls.gov/oes/current/oes\\_nat.htm#11-0000](http://www.bls.gov/oes/current/oes_nat.htm#11-0000)

\*\*Data provided by National Center for O\*NET Development (2016).

### Georgia's Hot Careers to 2022

Georgia Department of Labor (2016) listed several high demand occupations that ALEC Ph.D. holders are qualified to fill. The following table details selected occupations relevant to ALEC Ph.D. holders.

<b>Job Title</b>	<b>Job openings 2012-2022 (numbers in thousands)</b>	<b>Median annual wage, 2013</b>
Postsecondary education teachers	190	\$56,000
Postsecondary vocational education teachers	200	\$48,900

Education administrators, elementary and secondary	370	\$85,600
Education administrators, post-secondary	210	\$97,800
Educational, guidance, school, & vocational counselors	320	\$56,900
Middle school teachers, career/tech ed.	1,220	\$54,600
Public relations specialist	190	\$58,400
Marketing manager	230	\$126,400
Web developer	140	\$73,000

8) **Duplication:** Description of how the program does not present duplication of existing academic offerings in the geographic area, within the system as a whole, and within the proposing institution regardless of academic unit. If similar programs exist, indicate why these existing programs are not sufficient to address need and demand in the state/institution’s service region and how the proposed program is demonstrably different or complementary to other USG degrees and majors.

There are no ALEC Ph.D. degrees offered in the state of Georgia. The nearest similar program is offered at the University of Florida.

9.) **Collaboration:** Is the program in collaboration with another USG Institution, TCSG institution, private college or university, or other entity? Yes \_\_\_ or No X (place an X beside one)

10.) **Admission Criteria:** List the admission criteria for the academic program, including standardized test and grade point average requirements for admission into the program. Also, at what point (e.g., credit hours completed) are students admitted to the program.

ALEC doctoral applicants must complete a Master’s degree from an accredited university prior to being admitted into the Ph.D. program. Students seeking to become agriculture teacher educators (AGED focus area) must have a minimum of three years of professional work experience teaching agriculture at the middle or secondary level before being admitted.

Students must meet the minimum requirements for GPA and GRE scores of the UGA Graduate School to be admitted. Doctoral students will be admitted during the fall and spring semesters (beginning fall 2019) following application review and voting by the Graduate Education Committee (chaired by the Graduate Coordinator) within the ALEC department.

### 11.) Curriculum

a. Specify whether the proposed program requires full-time study only, part-time study only, or can be completed either full time or part time.

This program can be completed either full time or part time.

b. If the proposed program will be offered online, describe measures taken by the academic unit to sufficiently deliver the program via distance education technologies and provide instructional and learning supports for both faculty and students in a virtual environment. Will the program be offered in an asynchronous or synchronous format?

The program will not be offered online.

- c. List the entire course of study required to complete the academic program. Include the course prefixes, course numbers, course titles, and credit hour requirement for each course. Indicate the word “new” beside new courses. Include a program of study.

Course Code	Course Name	Credits	Semester Taken
ALDR 7400E	Communication in Agricultural and Environmental Science	3	First Fall
ADPR 7760	Digital and Social Communication Strategies	3	First Fall
QUAL 8405	Philosophy in Social Science Research Methods	3	First Fall
ALDR 8150	Program Development for Agricultural Leaders	3	First Spring
AGCM 8100 (NEW)	Culture-Centered Communication and Engagement	3	First Spring
COMM 8550	Advanced Topics in Interpersonal Communication	3	First Spring
QUAL 8410	Designing Qualitative Research	3	Second Fall
ERSH 8760	Advanced Topics in Structural Equation Modeling	3	Second Fall
ALDR 9000 (NEW)	Doctoral Research	3	Second Fall
ALDR 8100	Teaching and Learning Theories in Agricultural Leadership, Education, and Communication	3	Second Spring
ALDR 8030E	Diffusion of Innovations	3	Second Spring
ERSH 8595E	Research Ethics in the Professional and Social Sciences	3	Second Spring
ALDR 9000 (NEW)	Doctoral Research	3	Third Fall
COMM 8520	Seminar in Communication and Social Influence	3	Third Spring
ALDR 9300 (NEW)	Doctoral Dissertation	3	Third Spring
<b>TOTAL</b>		<b>45 credits</b>	<b>Graduation</b>

- d. State the total number of credit hours required to complete the program, but do not include orientation, freshman year experience, physical education, or health and wellness courses that are institutional requirements as defined in the Academic and Student Affairs Handbook, Section 2.3.1 and the Board Policy Manual, 3.8.1.

This program requires 45 credit hours for completion.

- e. Within the appendix, append the course catalog descriptions for new courses and their prerequisite courses. Include the course prefixes, course numbers, course titles, and credit hour requirements.

See Appendix D. There are no prerequisite courses for ALDR 9000 or ALDR 9300.

- f. If this is an undergraduate program, how does or would the department/institution use eCore, eMajor, or dual enrollment?

N/A

- g. If this is a doctoral program, provide the names of four external reviewers of aspirational or comparative peer programs complete with name, title, institution, e-mail address, telephone number, and full mailing address. External reviewers must hold the rank of associate professor or higher in addition to other administrative titles.

Dr. Ed Osborne, Professor of Agricultural Education, University of Florida  
407 Rolfs Hall  
PO Box 110540  
Gainesville, FL 32611  
352-273-2613  
[ewo@ufl.edu](mailto:ewo@ufl.edu)

Dr. Tom Dormody, Regents Professor, New Mexico State University  
111 Gerald Thomas Hall  
New Mexico State University  
Las Cruces, NM 88003  
575-646-4511  
[tdormody@nmsu.edu](mailto:tdormody@nmsu.edu)

Dr. Matt Baker, Professor of Agricultural Education, Texas Tech University  
Department of Agricultural Education & Communications  
Box 42131  
Lubbock, TX 79404-2131  
806-834-6358  
[matt.baker@ttu.edu](mailto:matt.baker@ttu.edu)

Dr. Martha Monroe, Professor of Environmental Education and Extension, University of Florida  
347 Newins-Ziegler Hall  
PO Box 110410  
University of Florida  
Gainesville, FL 32611-0410  
352-846-0878  
[mcmonroe@ufl.edu](mailto:mcmonroe@ufl.edu)

**12a) PROGRAM OF STUDY- GRADUATE ONLY (provide the program of study).**

All Ph.D. students will complete the common core (12 hours) and select one of four focus areas (12 hours). Students will also complete quantitative and qualitative research methods courses (12 hours), three hours of dissertation writing, and six hours of dissertation research for a total of 45 hours required to complete the Ph.D. program.

<b>Course Code</b>	<b>Course Titles and Descriptions</b>	<b>Credit Hours</b>	<b>Prerequisites</b>
<b>Common Core (12 hours)</b>			
ALDR 8100*	<b>Teaching and Learning Theories in Agricultural Leadership, Education, and Communication</b> Contemporary and foundational theory and research on teaching and learning processes with emphasis on applications in agricultural leadership, education, and communication. Emphasis on behavioral, social cognitive, cognitive, information processing, brain-based, constructivist, developmental, motivational, and transformational theories as they apply to contemporary agricultural leadership, education, and communication settings.	3	ALDR 8200 or ALDR 8200E
ALDR 8030E*	<b>Diffusion of Innovations</b> Students will develop a better understanding of the factors that influence changes in social systems. Students will analyze several examples of diffusion and determine how each represents the theory base supporting the process of diffusion.	3	ALDR 8200 or ALDR 8200E
ALDR 8150*	<b>Program Development for Agricultural Leaders</b> Basic problems, principles, and procedures involved in developing programs by leaders in agricultural organizations. Topics include needs assessment and citizen involvement techniques, instructional and evaluation elements.	3	ALDR 8200 or ALDR 8200E
ALDR 7400E*	<b>Communication in Agricultural and Environmental Science</b> Analysis of communication challenges faced by leaders in agricultural and environmental organizations and their constituents. Basic communication theory and targeted applications such as working with media, conducting advisory group meetings, marketing, negotiation, public affairs communication, networking among stakeholders, and conflict management and resolution required of leaders to sustain and improve organizational effectiveness.	3	AGCM 3200, COMM 3500 or equivalent

<b>Agricultural Communication Focus Area (12 Hours)</b>			
ADPR 7760*	<b>Digital and Social Communication Strategies</b> Students will learn about the types and practices of digital and social advertising and public relations strategies. Attention is given to evaluating these strategies, their role and uses, audience targeting, message design, and evaluation. Topics include mobile, community management, advertising, viral videos, SEO/SEM, and privacy, metrics, and ethical issues.	3	None
COMM 8520*	<b>Seminar in Communication and Social Influence</b> Familiarizes students with issues related to communication and social influence. Parameters of social influence, theories of social influence that emphasize communication processes, source and audience characteristics, message and channel properties, and attitudinal outcomes	3	None
AGCM 8100#	<b>Culture-Centered Communication &amp; Engagement</b> Explores the interaction of culture, structure, and agency in the purviews of communication and engagement activities in targeted communities. Topics are guided by critical theory and cultural studies in multiple contexts, including food production, food narratives, and community development.	3	None
COMM 8550*	<b>Advanced Topics in Interpersonal Communication</b> A readings and research seminar in theoretical topics of interpersonal communication. Areas of study will vary depending on the time lines of the topics and the research focus of the professor. Sample topics include communication in relational development, interracial communication, conflict, media, emotion, and interpersonal communication competencies.	3	None
<b>Agricultural Education Focus Area (12 Hours)</b>			
AGED 7020E*	<b>Methods of Instruction in Agricultural Education</b> Instructional procedures, materials, and evaluation techniques in agricultural education.	3	None
ALDR 7350*	<b>Team and Organizational Development</b> An interdisciplinary course on the understanding of groups, teams, and organizations related to agricultural organizations. Theories of group dynamics and applications of problem-solving skills. Team building skills are studied with practical applications. Profit and non-profit agricultural organizations are used as case studies.	3	None
ALDR 8300*	<b>History and Philosophy of Agricultural Education</b>	3	ALDR 8200 or ALDR 8200E

	Major historical people, events, policy, and legislation that have contributed to the development of agricultural education organizations and practice in the United States.		
ALDR 8400E*	<b>Advanced Program Evaluation/Data Analysis</b> Designed for students who have previously taken either Research Methods in Agricultural Education or introductory Program Evaluation and who wish to strengthen their skills in quantitative data collection, analysis, and interpretation. Topics include questionnaire development, reliability and validity, and inferential statistics, including t-tests, analysis of variance, correlation, and regression.	3	ALDR 7070 or ALDR 7020E or ALDR 8200
<b>Environmental Education Focus Area (12 Hours)</b>			
FANR 6444S*	<b>Foundations of Environmental Education</b> Foundational knowledge and applied service-learning experiences in the field of environmental education, including goals, theory, practice and history of environmental education and the competencies necessary to be a well-prepared environmental educator.	3	Permission of Department
FANR 7750*	<b>The Science of Sustainability</b> Sustainability is everywhere. Despite its popularity, however, the concept of sustainability is difficult to define or operationalize. This seminar will investigate definitions of sustainability and the scientific basis for operationalizing the concept. We will focus on quantifiable metrics that might help determine if we are managing our natural resources sustainably.	2	None
ALDR 8500E*	<b>Change Theories in Environmental Conservation</b> Theoretical foundations and applications of educational and communication strategies to create an environmentally sustainable world. Students conduct original research on behavior change while working with an educational organization in formal and non-formal settings to develop strategies that support responsible environmental behavior in agriculture and environmental science disciplines.	3	ALDR 8200 or ALDR 8200E
FANR 8900*	<b>University Teaching in Forestry and Natural Resources</b> Instructional policies and procedures as well as effective pedagogical approaches for university teaching in forestry and natural resources. Through the development of a teaching portfolio, students also learn how to document their instructional activities.	3	Permission of Department
<b>Extension Education Focus Area (12 Hours)</b>			
ALDR(A FST)(LA	<b>International Agricultural Development</b>	3	None



CS) 6710*	Analysis of international development programs, stressing the developing world's perspective. Study of issues affecting international cooperation, agricultural development and sustainability, technology transfer, and extension education		
ALDR(A GED)(A GCM) 6800E*	<b>Grantseeking</b> Funding proposal development for foundation and government agencies. Conceptualizing innovative projects that address societal needs, identifying funding sources, and developing proposals that follow agency guidelines, including a literature review, need for the project, approach, timeline, and budget.	3	None
ALDR 6080*	<b>Agricultural and Extension Administration</b> Administration and management of agricultural and extension educational programs and people. Four major domains of managerial activity; administrative, communications, supervision, and cognitive areas.	3	None
AGCM 8100#	<b>Culture-Centered Communication &amp; Engagement</b> Explores the interaction of culture, structure, and agency in the purviews of communication and engagement activities in targeted communities. Topics are guided by critical theory and cultural studies in multiple contexts, including food production, food narratives, and community development.	3	ALDR 7400E
<b>All Ph.D. students will complete Research methods courses (12 Hours)</b>			
QUAL 8400*	<b>Qualitative Research Traditions</b> Foundations of qualitative design: history, philosophy, nature, types, examples, and assessment. Reading and evaluating reports of qualitative research in education and identifying methodological issues.	3	ERSH 6200
QUAL 8410*	<b>Designing Qualitative Research</b> Disciplinary origins and cross-disciplinary uses, variations, applications, and evaluations of methods of collecting qualitative data. Choice of methods in the overall construction of qualitative designs, practice in selecting and collecting qualitative data for educational research, and examination of naturalistic data in the educational literature.	3	QUAL 8400
STAT 6210*	<b>Introduction to Statistical Methods I</b> First course on statistics emphasizing applications in social, behavioral sciences. Covers elementary topics, one and two sample inference, simple linear regression, some categorical data analysis. Uses point-and-click statistical software. Provides preparation for Introduction to Statistical Methods II.	3	None

STAT 6220*	<b>Induction to Statistical Methods II</b> A continuation of Introduction to Statistical Methods I. Introduces additional statistical methods not covered in the first course. Emphasizes applications in the social and behavioral sciences. Topics include inference for categorical variables, multiple regression, logistic regression, one-way ANOVA, two-way ANOVA, ANCOVA, and nonparametric methods. Uses point-and-click statistical software.	3	STAT 6210
<b>All Students will Complete Research and Dissertation courses (9 Hours)</b>			
ALDR 9000#	<b>Doctoral Research</b> Research while enrolled for a doctoral degree under the direction of faculty members. Independent research under the direction of a faculty member.	6	None
ALDR 9300#	<b>Doctoral Dissertation</b> Dissertation writing under the direction of the major professor. Independent research and preparation of the doctoral dissertation.	3	None

a) \*Existing courses

b) # Under curriculum committee review in CAPA as a new course (see Appendix C)

**Sample Program of Study – Student Pursuing the Agricultural Communication Focus Area**

Course Code	Course Name	Credits	Semester Taken
ALDR 7400E*	Communication in Agricultural and Environmental Science	3	First Fall
ADPR 7760	Digital and Social Communication Strategies	3	First Fall
QUAL 8405	Philosophy in Social Science Research Methods	3	First Fall
ALDR 8150	Program Development for Agricultural Leaders	3	First Spring
AGCM 8100#	Culture-Centered Communication and Engagement	3	First Spring
COMM 8550	Topics in Interpersonal Communication	3	First Spring
QUAL 8410	Designing Qualitative Research	3	Second Fall
ERSH 8760	Advanced Topics in Structural Equation Modeling	3	Second Fall
ALDR 9000#	Doctoral Research	3	Second Fall
ALDR 8100	Teaching and Learning Theories in Agricultural Leadership, Education, and Communication	3	Second Spring
ALDR 8030E	Diffusion of Innovations	3	Second Spring
ERSH 8595E	Research Ethics in the Professional and Social Sciences	3	Second Spring
ALDR 9000#	Doctoral Research	3	Third Fall

COMM 8520	Seminar in Communication and Social Influence	3	Third Spring
ALDR 9300#	Doctoral Dissertation	3	Third Spring
<b>TOTAL</b>		<b>45 credits</b>	<b>Graduation</b>

#Submitted to curriculum committee for review as new courses

**Reviewer #1: Dr. Ed Osborne, Professor of Agricultural Education, University of Florida**

407 Rolfs Hall  
 PO Box 110540  
 Gainesville, FL 32611  
 352-273-2613  
[ewo@ufl.edu](mailto:ewo@ufl.edu)

Dr. Osborne served as the department head for the Department of Agricultural Education and Communication for nearly 20 years before recently returning to a faculty role within the department. Under his leadership, the department was the top ranked agricultural education and communication program in the nation and continues to place more Ph.D. graduates into faculty positions than any other program nationally. He has authored or co-authored over 250 refereed and invited articles, papers, and presentations, including nine books.

**Reviewer #2: Dr. Tom Dormody, Regents Professor, New Mexico State University**

111 Gerald Thomas Hall  
 New Mexico State University  
 Las Cruces, NM 88003  
 575-646-4511  
[tdormody@nmsu.edu](mailto:tdormody@nmsu.edu)

Dr. Dormody served as the Director of the Division of Education and Dean of the Graduate School at CATIE (Center for Tropical Agricultural Research and Higher Education) headquartered in Turrialba, Costa Rica from 2012 to 2013. At CATIE he oversaw all graduate education programs (including four Ph.D. programs), the Technical Training Area, the Orton Memorial Library, and the Biostatistics Unit. Dr. Dormody was placed at CATIE as part of a collaborative agreement with NMSU. He has taught undergraduate courses in agricultural and technology teacher education, leadership and communications, planning community educational programs, and sustainability. His graduate courses have included research methods, advanced leadership, and the diffusion and adoption of agricultural innovations. He has received the Burlington Resources Foundation Faculty Achievement Award for Outstanding University Teaching from NMSU, the Western Region Award for Excellence in College and University Teaching in the Food and Agricultural Sciences from the USDA, the Distinguished Award for Graduate Teaching/Advisement from the NMSU Chapter of Gamma Sigma Delta, and is a NACTA (North American Colleges and Teachers of Agriculture) Teacher Fellow.

Dr. Dormody has researched problems related to secondary agricultural education and technology education programs, contributions of NMSU agricultural science and research

centers to the mission, university teaching, and youth leadership development. He has been recognized twice as Author of the Year for the Journal of Agricultural Education and with the E. B. Knight Journal Award from NACTA. He has also received the Western Region American Association for Agricultural Education Distinguished Research Award.

Dr. Dormody served as Agricultural and Extension Education Department Head for 14 years. He has provided national-level service to the American Association for Agricultural Education, Alpha Tau Alpha (the national professional honorary agricultural education fraternity), and the National FFA Organization. He holds a B.S. in horticultural science from Oregon State University, a MS in vegetable crops from the University of California at Davis, and a Ph.D. in agricultural and occupational education from Cornell University.

**Reviewer #3: Dr. Matt Baker, Professor of Agricultural Education, Texas Tech University**

Department of Agricultural Education & Communications

Box 42131

Lubbock, TX 79404-2131

[matt.baker@ttu.edu](mailto:matt.baker@ttu.edu)

(806) 834-6358

Dr. Baker is a Professor in the Department of Agricultural Education and Communications in the College of Agricultural Sciences and Natural Resources at Texas Tech University in Lubbock. Baker served eleven years in academic administration including three years as founding dean of University College at Texas Tech and eight years as department chairperson in his home department. Baker has had previous faculty experience at the University of Florida and Cal Poly University. Baker received a B.S. (1979) and M.Ed. (1986) from Texas Tech, and a Ph.D. from Ohio State (1990).

He currently teaches graduate courses in Research Methods, Program Evaluation, College Teaching, and Applied Multivariate Data Analysis. He also teaches a senior-level undergraduate course in Organizational Leadership. His research interests include capacity building of agricultural colleges and programs in developing countries as well as the development of a unified methodology for assessing neurocognitive processing utilizing fMRI, psychophysiology, and eye-tracking technologies. He volunteers during summers for capacity building projects in developing countries, with service most recently in both West Africa and Asia.

**Reviewer #4: Dr. Martha Monroe, Professor of Environmental Education and Extension, University of Florida**

347 Newins-Ziegler Hall

PO Box 110410

University of Florida

Gainesville, FL 32611-0410

[mcmunroe@ufl.edu](mailto:mcmunroe@ufl.edu)

(352) 846.0878

Dr. Monroe is an expert in Environmental Education and is responsible for extension activities, research, and courses related to environmental education, conservation behavior, and human dimensions of wildland-urban interface issues. Her work includes the development and evaluation of curriculum resources for educators and understanding how people perceive issues such as wildfire and woody biomass in the South. She is exploring strategies for engaging people in helpful dialogue and productive change as we move toward sustainability. Prior to joining the School in 1997, she directed the Resource Center for Green COM, an international environmental education and communications project, and coordinated the development of the EE Toolbox for the National Consortium for Environmental Education and Training. She was on the faculty of the College of Natural Resources at the University of Wisconsin-Stevens Point and developed award-winning youth programs at the Dahlem Environmental Education Center in Michigan. She was the President of the North American Association for Environmental Education (2006-2007). Dr. Monroe is committed to using education to help move communities and nations toward conservation behavior and sustainable systems. Her areas of expertise provide valuable guidance on the Environmental Education focus area of the Ph.D. proposal.

The ALEC department will use current funding to support three graduate research assistantships per year. Additional assistantships will be secured from competitive grant funding and training programs such as the National Needs Fellowships (USDA-NIFA). Current doctoral students and those applying to the program will be able to apply for assistantships by submitting a Letter of Intent and a resume to the Graduate Education Committee in the ALEC department. Chaired by the Graduate Coordinator, the committee will review applications and align student qualifications, research interests, and experiences with the availability of assistantship funds.

All Ph.D. students will be required to complete a residency requirement of 30 hours within the ALEC department. During residency, doctoral students will serve as teaching and research assistants alongside faculty, gaining valuable skills to prepare them for careers in academia and as leaders in government agencies, non-profit organizations, or industry.

**14) Alternative Curricular Pathway:** What alternative curricular pathways exist (for example for students who were not admitted to the major but are still in satisfactory standing at the institutional level)? Please describe them below and describe how these students are advised about the alternative(s).

N/A

**15) Prior Learning Assessment:** Does the program include credit for prior learning assessment? How will credit be assessed and for what specific courses in the curriculum inclusive of prerequisites? If this is not applicable, indicate "NA" in this section.

N/A

**16) Open Educational Resources:** Does the program include open educational resources that have been assessed for quality and permissions, can be connected with related curricular resources, and are mapped to learning outcomes? If this is not applicable, indicate "NA" in this section.

N/A

**17) Waiver to Degree-Credit Hour** (if applicable):

- All bachelor's degree programs require 120-semester credit hours.
- Master's level programs have a maximum of 36-semester hours. Semester credit-hours for the program of study that are above these requirements require a waiver to degree-credit hour request with this proposal.
- State whether semester credit-hours exceed maximum limits for the academic program and provide a rationale.
- This is not applicable for specialist in education and doctoral programs.

N/A

**18) Student Learning Outcomes:** Student Learning outcomes and other associated outcomes of the proposed program (provide a narrative explanation).

**Knowledge Outcomes**

At the conclusion of the Ph.D. program, graduates will be able to demonstrate knowledge of:

- Appropriate quantitative and qualitative research methods for measuring social phenomena
- Relevant emerging issues within their respective foci (AGED, AGCM, ENED, EXED)
- Relevant theoretical frameworks within their respective foci
- Teaching and learning theories for knowledge transfer in formal (classroom) and non-formal (non-classroom) learning environments
- Teaching methods for use with youth and adults in formal and non-formal learning environments
- Theories that inform the process of change within individuals and organizations
- Methods for planning, implementing, and evaluating educational activities and programs
- Theories of communication

**Skills Outcomes**

At the conclusion of the Ph.D. program, graduates will be able to:

- Successfully design and conduct research studies publishable in top-tier, peer-reviewed journals
- Convey research results from quantitative or qualitative studies understood by non-academic audiences
- Target and address emerging issues within their respective foci using appropriate educational methods
- Effectively teach a planned lesson to youth or adults in both formal and non-formal learning environments
- Plan, implement, and evaluate educational programs targeting specific needs of the audience

- Engage with other professionals and the general public to positively influence agricultural and environmental issues locally and globally

**19) Assessment:** Describe institutional programmatic assessments that will be completed to ensure academic quality, viability, and productivity.

Ph.D. student progress within the program will be assessed annually by their major professor and the Graduate Coordinator. A rubric will be used to assess progress and will evaluate the student on achievements in coursework, progress toward the comprehensive exam, progress toward their dissertation proposal and research, and achievements in teaching (e.g., course evaluations) and scholarship (e.g., conference submissions/articles in review for publication). In addition, long-term learning outcomes and skills will be assessed via exit interviews with doctoral students and interviews with employers of recent ALEC Ph.D. graduates.

**20) Accreditation:** Describe disciplinary accreditation requirements associated with the program (if applicable, otherwise indicate NA).

N/A

**21) SACSCOC Institutional Accreditation:** Is program implementation contingent upon SACSCOC action (e.g., substantive change, programmatic level change, etc.)? Please indicate Yes or No.     No    

**ENROLLMENT SECTION** (*Consult with Enrollment Management*)

**22) Recruitment and Marketing Plan:** What is the institution’s recruitment and marketing plan? What is the proposed program’s start-up timeline?

Following approval, the ALEC Department is prepared to begin reviewing and accepting applicants for the fall 2019 semester. As of June 2018, the department has already secured funding to support seven doctoral students on 12-month, half-time assistantships. Interest is growing in the ALEC Ph.D. at the national-level as marketing information has been shared by faculty at their respective professional conferences. To fill these assistantships, position announcements will be shared through respective listserves to recruit a diverse pool of applicants nationally.

**23) Enrollment Projections:** Provide projected enrollments for the program specifically during the initial years of implementation.

- a) Will enrollments be cohort-based? Yes      or No   X   (place an X beside one)
- b) Explain the rationale used to determine enrollment projections.

Enrollment projections were determined based on multiple factors. First, to abide by university enrollment policy, at least three doctoral students will graduate each year from the ALEC Ph.D. program. Second, current departmental assistantship funds acquired through external grants and credit hour monies to support Ph.D. students were used to determine the number of students

who could be supported on 50%-time doctoral assistantships for three years each. Finally, demand for the ALEC Ph.D. captured through recruitment inquiries was another metric used to predict enrollment numbers in the program.

	First FY	Second FY	Third FY	Fourth FY
<b>I. ENROLLMENT PROJECTIONS</b>				
<b>Student Majors</b>				
Shifted from other programs	0	0	0	0
New to the institution	3	3	4	5
<b>Total Majors</b>	<b>3</b>	<b>6</b>	<b>10</b>	<b>12</b>

## 22) Faculty

- a) Provide the total number of faculty members that will support this program:   12
- b) Submit your SACSCOC roster for the proposed degree. Annotate in parentheses the person who will have administrative responsibility for the program. Indicate whether any positions listed are projected new hires and currently vacant.

Day-to-day administration of the program will be overseen by the department head and carried out by the Graduate Education Committee and all graduate faculty members within the ALEC department. The Graduate Education Committee is comprised of three graduate faculty members and chaired by the department Graduate Coordinator, Dr. Nick Fuhrman. The committee is responsible for sharing important deadlines with other faculty advising Ph.D. students and reviewing doctoral application packets within a month of submission.

The following table provides a summary of the graduate faculty members who will be involved in advising Ph.D. students enrolled in the program along with the workload (assignment) of each faculty member. The faculty represent a balance among the four foci: Agricultural Education (two-four faculty), Agricultural Communication (two faculty), Environmental Education (two faculty), and Extension Education with a Domestic or International focus (four faculty). Faculty in the ALEC department possess deep expertise in experiential education, a core mission of UGA, particularly through undergraduate and graduate study abroad service-learning experiences (Scotland and Romania). The research, teaching, and service expertise of ALEC faculty make them well-positioned to lead the Ph.D. program to national prominence. No additional faculty hires are required to support the program.

Faculty Name	Rank	Highest Degree	Other Degrees Earned	Academic Discipline	Current Workload
James C. Anderson II	Assistant Professor	Ph.D. in Agricultural Education (Teacher	M.A. in Economics and Entrepreneurship for Educators;	Agricultural Leadership	75% Instruction, 25% Extension



		Education – University of Missouri)	B.S. in Agricultural & Environmental Communications and Education		
Abigail Borron	Assistant Professor	Ph.D. in Youth Development and Agricultural Education (Purdue University)	M.S. in Youth Development and Agricultural Education; B.A. in English	Agricultural Communication; Culture-centered communication	75% Instruction, 25% Extension
D. Barry Croom	Associate Professor	Ed.D. in Occupational Education; (NC State)	M.Ed. in Agricultural Education; B.S. Agricultural Education	Agricultural Education	75% Instruction, 25% Research
(Leslie Edgar) – with administrative responsibilities	Professor and Department Head	Ph.D. in Agricultural Leadership, Education, and Communications (Texas A&M University)	M.S. in Agricultural Systems, Technology, and Education; B.S. in Animal Science	Agricultural Communications	100% Administration
Nick Fuhrman	Associate Professor and Graduate Coordinator	Ph.D. in Agricultural Education and Communication (UF)	M.S. in Forestry; B.S. in Forestry	Program Evaluation; Extension Education, Environmental Education; Quantitative Research	60% Instruction, 40% Extension
Jessica Holt	Assistant Professor and Undergraduate Coordinator for Agricultural Communication Major	Ph.D. in Agricultural Education and Communication (UF)	M.S. in Agricultural Communication; B.S. in Agricultural Education and Communication	Agricultural Communication; Print design; Photography	75% Instruction, 25% Research
Kay Kelsey	Professor	Ph.D. in Agricultural, Extension, & Adult Education (Cornell University)	M.A. in Agricultural & Extension Education; Teaching Credential: Agricultural Education; B.S.	Program evaluation; Adult education; Qualitative Research	33% Instruction, 33% Extension, 33% Research

			in Animal Science		
Maria Navarro	Professor	Ph.D. in Agricultural Education (TAMU)	M.S. in Agricultural Engineering; B.S. in Agricultural Engineering	International Agriculture & Development; Extension Education, Interdisciplinary Education	80% Instruction, 20% Comm. Service
Milton G. Newberry, III	Assistant Professor	Ph.D. in Agricultural Education and Communication (UF)	M.AL in Agricultural Leadership; B.S. in Wildlife & Fisheries Science	Program Evaluation; Extension Education, Environmental Education; Quantitative Research	50% Instruction, 50% Research
Jason B. Peake	Professor	Ph.D. in Agricultural Education, Teacher Preparation, and Distance Education (TAMU)	M.A. in Computer Education Technology/ Instructional Design Systems; B.S. in Agricultural Education	Agricultural Education, Distance Education, Instructional Design	75% Instruction, 25% Research
Eric Rubenstein	Assistant Professor and Undergraduate Coordinator for Agricultural Education	Ph.D. in Agricultural Education and Communication (UF)	M.S. in Agricultural Education and Communication; B.S. in Agricultural & Extension Education	Agricultural Education; Nonformal Education; Program Evaluation	75% Instruction, 25% Research
Ashley Yopp	Assistant Professor	Ph.D. in Agricultural Leadership, Education, and Communication (TAMU)	M. S. in Agricultural Education with Teaching Licensure; B. A. in Political Science	Agricultural Education;	75% Instruction, 25% Research

**Courses Taught (including term, course number & title, credit hours (D, UN, UT, G))**

<b>Faculty Name</b>	<b>Courses Taught: course number &amp; title</b>	<b>Term</b>	<b>Credit hours</b>	<b>D, UN, UT, G</b>
---------------------	--	-------------	---------------------	---------------------

		<b>Fall, Spring, Summer</b>		
James C. Anderson, II	ALDR 7350E, Team and Organizational Development	Fa	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Abigail Borron	ALDR 7400E, Communication in Agricultural and Environmental Science	Fa	3	G
	AGCM 8100, Culture-Centered Communication and Engagement	Sp	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
D. Barry Croom	AGED 7020E, Methods of Instruction	Fa	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Nick Fuhrman	FANR 5690L/7690L, Natural Resource Management for Teachers	Sp (even year)	3	UT/G
	ALDR 7070E, Program Development for Agricultural Leaders	Sp	3	G
	ALDR 6080, Agriculture and Extension Administration	Fa	3	G
	ALDR 8400E, Advanced Program Evaluation/Data Analysis	Sp	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Jessica Holt	AGCM 7600, Digital Storytelling of Agricultural and Environmental Science Issues	Sp	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G

	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Kay Kelsey	ALDR 4800E/6800E, Grantseeking	Su	3	UT/G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Maria Navarro	ALDR 8030, Diffusion of Innovations	Sp	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Milton G. Newberry, III	ALDR 8350E, Program Evaluation	Fa	3	G
	ALDR 8200E, Research Methods in Agricultural Education	Sp	3	G
	ALDR 8500E, Change Theories in Environmental Conservation	Fa	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Jason B. Peake	AGED 4350/6350, Curriculum Planning in Agricultural Education	Fa	3	UT/G
	AGED 4360/6360, Instructional Strategies in Agricultural Education	Fa	3	UT/G
	AGED 4040/6040, Floriculture for Educators	Sp	3	UT/G
	AGED 5460, Student Teaching in Agricultural Education	Sp	Varied	UT/G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Eric Rubenstein	AGED 4340/6340, Developing Community Programs in Agriculture	Fa	3	UT/ G
	AGED 4350/6350, Curriculum Planning in Agricultural Education	Fa	3	UT/ G

	AGED 5460, Student Teaching in Agricultural Education	Sp	Varied	UT/ G
	AGED 4370/6370, Agricultural Science for Teachers	Sp	3	UT/ G
	ALDR 8100, Teaching and Learning Theories in Agricultural Leadership, Education, and Communication	Sp	3	G
	ALDR 8300, History and Philosophy of Agricultural Education	Sp	3	G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G
Ashley Yopp	AGED 4010/6010, Early Clinical Experience in Agricultural Education	Fall	3	UT/G
	AGED 4040/6040, Floriculture for Educators	Sp	3	UT/G
	AGED 4370/6370, Agricultural Science for Teachers	Fall	3	UT/G
	AGED 5460, Student Teaching in Agricultural Education	Sp	Varied	UT/G
	ALDR 9000, Doctoral Research	Fa/Sp	Varied	G
	ALDR 9300, Doctoral Dissertation	Fa/Sp	Varied	G

D, UN, UT, G: Developmental, Undergraduate Non-transferable, Undergraduate Transferable, Graduate

Faculty load analysis is detailed in the above table. Only three new courses are required to offer the Ph.D. program, AGCM 8100, ALDR 9000, and ALDR 9300. Faculty teaching loads have been reduced over the past three years under the leadership of the former department head, Dr. Kay Kelsey, in preparation for developing a Ph.D. program. Previously, faculty members were 100% Instruction, teaching up to 10 courses per year. Currently, faculty members have been reduced to 75% Instruction, 25% Research to allocate more time to scholarship and advising doctoral level students. On average, faculty with a 75% Instruction appointment will teach 5 courses per year or less.

- a) Does the institution require additional faculty to establish and implement the program?  
Yes or No.     No     Please indicate your answer in the space provided.

Describe the institutional plan for recruiting additional faculty members in terms of required qualifications, financial preparations, timetable for adding faculty, and whether resources were shifted from other academic units, programs, or derived from other sources. Explain clearly whether additional faculty hires can be supported with institutional funds.

N/A - No new faculty beyond current staffing are required.

### 23) Fiscal, Tuition, and Estimated Budget

a) Describe the resources that will be used specifically for the program.

**Personnel:** The majority of expenses for this program are attributed to salary and benefits for tenure-track faculty members and one department head with graduate faculty status (3 professors, 2 associate professors, 7 assistant professors) and two adjunct professors with graduate faculty status. Current faculty will teach courses and advise doctoral students conducting research and writing the dissertation. Existing ALEC faculty, the majority hold 75% Instruction and 25% Research appointments, will teach courses already in place for the Master of Agricultural and Environmental Education (MAEE), upgraded to support Ph.D. level curriculum. No new faculty will be hired to support the degree.

**Library:** UGA Libraries own over 4.6 million volumes, 6.6 million microforms units, and subscribes to over 7,000 print journals. They have access to over 48,000 electronic full-text journals and 400,000 full text e-books. UGA Libraries is a member of the Association of Research Libraries. The Library receives all U.S. government publications made available through the federal Depository Library Program as a regional depository. GALILEO provides access to over 400 databases, such as AGRICOLA; Communication and Mass Media Complete; Education Research Complete; Environmental Sciences and Pollution Management; ERIC; PsychINFO; and Web of Science relevant to Agricultural Leadership, Education and Communication disciplines. In addition, ALEC faculty are supported by Liz Holdsworth, Science Librarian.

The Library has access to all journals relevant to the study of ALEC disciplines. The major journals in the discipline are either physically available or available on line, such as the *Journal of Agricultural Education*, *Journal of Applied Communications*, *Journal of Applied Environmental Education and Communication*, *Journal of International Agricultural and Extension Education*, *North American Colleges & Teachers of Agriculture Journal*, *Journal of Extension*, and *Journal of Leadership Education*. If a particular journal is neither physically held nor available online, it can be accessed through interlibrary loan.

The library currently fully supports doctoral-level resources (reference librarians, journals, books, etc.) necessary for the ALEC Ph.D. curriculum. No new library resources are necessary to support the degree.

**Laboratories:** The Ph.D. in ALEC is a social and behavioral science degree; thus, no traditional laboratories are required. Our laboratories generally consist of youth and adult Extension

educational programs, international development programs, public schools, and environmental education camps. No new laboratory space or facilities are required to support the degree.

**Supplies:** Supplies required to offer the degree are integrated into the departmental instruction operating budget. No new supplies will be required to support the degree.

**Capital expenditures:** The department has existing infrastructure to support the Ph.D. program. The program will use existing classroom and office space, technology, and support staff. New graduate student office space has been created over the past two years. ALEC added five additional student work desks to support anticipated growth in graduate students. No new capital expenditures are required to support the degree.

- b) Does the program require a tuition cost structure different from or above a regular tuition designation for the degree level? Yes \_\_\_\_ or No   X   (place an X beside one)
- c) Does the program require a special fee for the proposed program? Yes \_\_ or No   X   (place an X beside one)
- d) If the program requires a different tuition cost structure or special fee, such requests require approval through both the Committee on Academic Affairs (for the academic program) and the Committee on Fiscal Affairs (for the tuition increase or special fee designation). The resultant tuition and/or fee request for a new degree is to be submitted to both the academic affairs and fiscal affairs offices. Complete Appendix III that includes information for a differential tuition cost structure involving a proposal for a new academic program.

N/A

- e) Note: The web link for approved tuition and fees for USG institutions is located at the following url: [http://www.usg.edu/fiscal\\_affairs/tuition\\_and\\_fees](http://www.usg.edu/fiscal_affairs/tuition_and_fees)
- f) Budget Instructions: Complete the form further below and **provide a narrative to address each of the following:**
- g) For Expenditures (*ensure that the narrative matches the table*):
  - i. Provide a description of institutional resources that will be required for the program (e.g., personnel, library, equipment, laboratories, supplies, and capital expenditures at program start-up and recurring).
  - ii. If the program involves reassigning existing faculty and/or staff, include the specific costs/expenses associated with reassigning faculty and staff to support the program (e.g., cost of part-time faculty to cover courses currently being taught by faculty being reassigned to the new program, or portion of full-time faculty workload and salary allocated to the program).

Existing ALEC faculty have the availability to assume additional mentoring duties at the doctoral level based on recent strategic hires. ALEC hired six new tenure-track assistant

professors over the past two years in anticipation of applying for the Ph.D. degree. Current faculty-to-student ratios for undergraduate enrollment are 10 students to 1 faculty. The current ratio for the MAEE program is 4:1; therefore, ALEC has capacity to support additional 8000-9000 level courses and doctoral-level students. The coursework required for the Ph.D. program includes 36 hours of courses and 9 hours of research and dissertation. Culture-Centered Communication and Engagement (AGCM 8100), Doctoral Research (ALEC 9000) and Doctoral Dissertation (ALEC 9300) hours are the only new courses under development. New course descriptions are provided in Appendix D.

### **Faculty Costs for New Courses**

To offer the ALEC Ph.D., the establishment of three new courses (AGCM 8100, ALDR 9000, and ALDR 9300) will be required. Over the first three years of the program, these courses will cost \$15,000 in faculty time. With other graduate assistantships, administrative support staff, and personnel costs, the ALEC Ph.D. program will be most expensive in terms of faculty costs during years two and three, during which ALDR 9000 and ALDR 9300 will be offered.

ALEC's projected number of students entering the Ph.D. program over the next five years is three new students in year one, three new students in year two, four new students in year three, five new students in year four, and five new students in year five, for a maximum enrollment of 20 Ph.D. students in five years.

### ***Faculty Instruction Expenses***

#### **Faculty Costs for Existing Courses**

The 36 credit hours of existing courses will require reallocation of resources within our current course offerings in terms of faculty time spent mentoring doctoral students and grading additional assignments. Currently, graduate courses in the ALEC program are offered to master's students where, on average, 15 out of 20 seats are filled. The remaining five seats could be filled by ALEC Ph.D. students. While there is sufficient availability of seats in existing course sections for doctoral students, faculty spend on average 20% more time mentoring a doctoral student versus a master's student by adding additional assignments and rigor to the curriculum.

We anticipate that, on average, 70% of the students enrolled in graduate courses will be master's students and 30% will be Ph.D. students. The increased workload for a class of 20 graduate students (14 master's + 6 Ph.D.) would be 10% more time or cost to offer a graduate course to support doctoral students. (Assume an index of 100 hours spent teaching a course/20 students = 5 hours/student. (5 hours x 14 Masters) + (6 hours x 6 Ph.D.) = 106 hours total time.  $100/106 = .94$  or 10 additional hours/course.)

#### **Program Personnel Other Than Instruction**

ALEC has a graduate education coordinator, Dr. Nick Fuhrman, and one student affairs professional to support graduate education. Dr. Fuhrman is given release time for his role as



graduate coordinator. No new non-instructional resources are needed to support the Ph.D. program.

**Graduate Assistant Expenses**

Three assistantships per year (\$6,000 per semester/student) paid from resident instruction funds will be reallocated from the master’s to doctoral level. This is a reallocation cost of \$36,000 per year. Future faculty research grants will support additional assistantships.

**Support Staff Expenses for Existing Employees**

No new staff positions will be needed for the Ph.D. program as the staff have availability within their normal schedule to accommodate additional students. The table below estimates the portion of staff salaries that will be reallocated to the Ph.D. program.

***Reallocated Staff Funds to Support the Ph.D. Program***

Item	Year 1	Year 2	Year 3	Year 4
Graduate faculty coordinator (reallocation)	\$5,000	\$5,000	\$5,000	\$5,000
Graduate Assistantships (3 GRA reallocated from existing funds)	\$36,000	\$36,000	\$36,000	\$36,000
Administrative academic support staff (reallocation)	\$5,000	\$5,000	\$5,000	\$5,000
Business manager staff (reallocation)	\$1,500	\$1,500	\$1,500	\$1,500
<b>Total</b>	<b>\$47,500</b>	<b>\$47,500</b>	<b>\$47,500</b>	<b>\$47,500</b>

- h) For Revenue (*ensure that the narrative matches the table*):
  - i. If using existing funds, provide a specific and detailed plan indicating the following three items: source of existing funds being reallocated; how the existing resources will be reallocated to specific costs for the new program; and the impact the redirection will have on units that lose funding.

A portion of faculty and staff salaries attributed to the Ph.D. program, as well as the reallocated graduate assistantships, are paid from base budget resident instruction funds. In 2015-16 ALEC supported three master’s-level GRA from resident instruction funds and an additional eight GRA from faculty grants, new-hire start-up funds, and Extension assistantships. Other revenue sources included the CAES Office of Diversity Relations, 4-H Office, and federal grants from poultry science and crop and soil science faculty members collaborating with ALEC faculty.

**How the Existing Resources Will Be Reallocated to Specific Costs for the New Program**

Faculty teaching time will be reallocated from master’s students to Ph.D. students. Graduate research assistantships will be reallocated from the master’s degree to the doctoral degree.

**The Impact the Redirection Will Have on Units That Lose Funding**

Reallocation of graduate research assistantships from the master’s degree to the doctoral degree will reduce the number of resident master’s students, who will be replaced with resident

doctoral students. This reallocation will improve faculty productivity with increased research and grant-seeking support from more highly trained GRAs who will enter the Ph.D. program with a master's degree. We expect a net positive gain in faculty productivity and scholarship as a result of the reallocation.

- ii. Explain how the new tuition amounts are calculated.

The following table shows the expected tuition for a student to complete the course requirements of 45 hours over six semesters. Current trends for the master's degree suggest that 20% of students are out-of-state. Therefore, we estimate that 20% of doctoral students will be out of state.

***Expected Tuition for Ph.D. Students***

In-state student	Year 1	Year 2	Year 3	Tuition Cost to Student		Total
\$4,246 x 2 semesters	\$8,492	\$8,492	\$3,186	\$20,170		
Out of state student						
\$12,045 x 2 semesters	\$24,090	\$24,090	\$9,036	\$57,216		
Number of expected students	Income from In-State Tuition		Income from Out-of-State Tuition <sup>#</sup>			
Year 1 = 2 students	\$12,744		Year 1 = 1 student	\$18,072	\$30,816	
Year 2 = 5 students	\$31,860		Year 2 = 1 student	\$18,072	\$49,932	
Year 3 = 8 students	\$44,604		Year 3 = 2 students	\$27,108	\$71,712	
Year 4 = 8 students	\$54,162		Year 4 = 2 students	\$36,144	\$90,306	
<b>Total</b>	<b>\$143,370</b>			<b>\$99,396</b>	<b>\$242,766</b>	

<sup>#</sup>The uniqueness of the ALEC Ph.D. program makes it well-positioned to attract doctoral students nationally. For example, the program's Extension Education and Environmental Education tracts are unique in the ALEC discipline. A national needs assessment recently revealed the demand for those specifically with doctoral degrees in Extension Education and Environmental Education. The ALEC faculty feel confident in attracting students from outside of Georgia.

- iii. Explain the nature of any student fees listed (course fees, lab fees, program fees, etc.). Exclude student mandatory fees (i.e., activity, health, athletic, etc.).

N/A

- iv. If revenues from Other Grants are included, please identify each grant and indicate if it has been awarded.

N/A

- v. If Other Revenue is included, identify the source(s) of this revenue and the amount of each source.

N/A

- i) Revenue Calculation: Provide the revenue calculation, in other words, the actual calculation used to determine the projected tuition revenue amounts for each fiscal year involving start-up and implementation of the proposed program.

Please see table above.

- j) When Grand Total Revenue is not equal to Grand Total Costs:
  - i. Explain how the institution will make up the shortfall. If reallocated funds are the primary tools being used to cover deficits, what is the plan to reduce the need for the program to rely on these funds to sustain the program?

N/A

- ii. If the projected enrollment is not realized, provide an explanation for how the institution will cover the shortfall.

It is anticipated that in the first four years that the projected enrollment will be 3, 6, 10, and 12 students. While it is anticipated that the projected enrollment will be realized, a shortfall will be covered initially by reallocation of funds. The ALEC Department currently has thirteen tenure-track faculty who have been writing grants with the anticipation of the Ph.D. program becoming available. Included in those grants are assistantships for Ph.D. graduate assistants, which should aid in student recruitment.

- iii. If the projected enrollment is not realized, what are your next action steps in terms of bolstering the program, potentially altering the program, teach-outs, a planned phase-out, etc.?

If projected enrollment is not realized, program evaluation data will be used to modify the program to better fit student needs and increase enrollment. Additionally, recruitment efforts will be refined within the first two years to better target and recruit students. Grant funded assistantships will also increase in order to increase student recruitment efforts. If enough students are not enrolled in the program by 2022 to make the program financially sustainable, then a three-year teach-out phase will begin in order to finish out existing students and phase out the program.

<b>I. EXPENDITURES</b>	First FY Dollars	Second FY Dollars	Third FY Dollars	Fourth FY Dollars
<b>Personnel – reassigned or existing positions</b>				
Faculty (see 23.g.ii) – establishing three new courses during year 1	\$15,000	\$0	\$0	\$0
Part-time Faculty (see 23.g.ii)	0	0	0	0
Graduate Assistants (see 23.g.ii)	\$36,000	\$36,000	\$36,000	\$36,000
Administrators (see 23.g.ii)	\$5,000	\$5,000	\$5,000	\$5,000
Support Staff (see 23.g.ii)	\$5,000	\$5,000	\$5,000	\$5,000
Fringe Benefits	0	0	0	0
Other Personnel Costs	\$1,500	\$1,500	\$1,500	\$1,500
<b>Total Existing Personnel Costs</b>	<b>\$62,500</b>	<b>\$47,500</b>	<b>\$47,500</b>	<b>\$47,500</b>

<b>EXPENDITURES (Continued)</b>				
<b>Personnel – new positions (see 23.g.i)</b>				
Faculty	0	0	0	0
Part-time Faculty	0	0	0	0
Graduate Assistants	0	0	0	0
Administrators	0	0	0	0
Support Staff	0	0	0	0
Fringe Benefits	0	0	0	0
Other personnel costs	0	0	0	0
<b>Total New Personnel Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Start-up Costs (one-time expenses) (see 23.g.i)</b>				
Library/learning resources	0	0	0	0
Equipment	0	0	0	0
Other	0	0	0	0
Physical Facilities: construction or renovation (see section on Facilities)	0	0	0	0
<b>Total One-time Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Operating Costs (recurring costs – base budget) (see 23.g.i)</b>				
Supplies/Expenses	0	0	0	0
Travel	0	0	0	0
Equipment	0	0	0	0
Library/learning resources	0	0	0	0
Other	0	0	0	0
<b>Total Recurring Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL COSTS</b>	<b>\$62,500</b>	<b>\$47,500</b>	<b>\$47,500</b>	<b>\$47,500</b>
<b>III. REVENUE SOURCES</b>				
<b>Source of Funds</b>				

Reallocation of existing funds (see 23.h.i)	\$36,000	\$36,000	\$36,000	\$36,000
New student workload	0	0	0	0
New Tuition (see 23.h.ii)	\$30,816	\$49,932	\$71,712	\$90,306
Federal funds	0	0	0	0
Other grants (see 23.h.iv)	0	0	0	0
Student fees (see 23.h.iii) Exclude mandatory fees (i.e., activity, health, athletic, etc.).	0	0	0	0
Other (see 23.h.v)	0	0	0	0
New state allocation requested for budget hearing	0	0	0	0
<b>GRAND TOTAL REVENUES</b>				
	\$66,816	\$85,932	\$107,712	\$126,306
<b>Nature of Revenues</b>				
Recurring/Permanent Funds	\$66,816	\$85,932	\$107,712	\$126,306
One-time funds	0	0	0	0
<b>Projected Surplus</b> (Grand Total Revenue – Grand Total Costs) (see 20.h.i. & 20.h.ii).				
	+\$4,316	+\$38,432	+\$60,212	+\$78,806

## 24) Facilities/Space Utilization for New Academic Program Information

Facilities Information — Please Complete the table below.

		Total GSF
<b>a.</b>	<b>Indicate the floor area required for the program in gross square feet (gsf). When addressing space needs, please take into account the projected enrollment growth in the program over the next 10 years.</b>	<b>2,500</b>
<b>b.</b>	<b>Indicate if the new program will require new space or use existing space. (Place an "x" beside the appropriate selection.)</b>	
	<b>Type of Space</b>	<b>Comments</b>
i.	Construction of new space is required.	N/A
ii.	Existing space will require modification.	N/A
iii.	If new construction or renovation of existing space is anticipated, provide the justification for the need.	N/A
iv.	Are there any accreditation standards or guidelines that will impact facilities/space needs in the future? If so, please describe what the impact will be.	N/A
v.	Will this program cause any impacts on the campus infrastructure, such as parking, power, HVAC, etc. If so, indicate the nature of the impact, estimated cost and source of funding.	N/A
vi.	Existing space will be used as is.	X
<b>c. If new space is anticipated, provide information in space below.</b>		
i.	Estimated construction cost	N/A
ii.	Estimated total project budget cost	N/A
iii.	Proposed source of funding	N/A
iv.	Availability of funds	N/A
v.	When will the construction be completed and ready for occupancy? (Indicate semester and year.)	N/A
vi.	How will the construction be funded for the new space/facility?	N/A
vii.	Indicate the status of the Project Concept Proposal submitted for consideration of project authorization to the Office of Facilities at the BOR. Has the project been authorized by the BOR or appropriate approving authority?	N/A
<b>d. If existing space will be used, provide information in space below.</b>		
Provide the building name(s) and floor(s) that will house or support the program. Indicate the campus, if part of a multi-campus institution and not on the main campus. Please do not simply		

	list all possible space that could be used for the program. We are interested in the actual space that will be used for the program and its availability for use.			
	Four Towers, 2 <sup>nd</sup> floor. 405 College Station Road, Athens, GA 30602. Classroom 213 (2,000 sq ft), 214 Four Towers, student offices (500 sq ft)			
<b>e.</b>	<b>List the specific type(s) and number of spaces that will be utilized (e.g., classrooms, labs, offices).</b>			
<b>i.</b>	<b>No. of Spaces</b>	<b>Type of Space</b>	<b>Number of Seats</b>	<b>Assignable Square Feet (ASF)</b>
	1	Classrooms	24	2,000
	0	Labs (dry)	0	0
	0	Labs (wet)	0	0
	0	Meeting/Seminar Rooms	10	0
	2	Offices		500
	0	Other (specify)		0
<b>Total Assignable Square Feet (ASF)</b>				<b>2,500</b>
<b>ii.</b>	If the program will be housed at a temporary location, please provide the information above for both the temporary space and the permanent space. Include a time frame for having the program in its permanent location.			
	N/A			
<b>Chief Business Officer or Chief Facilities Officer Name &amp; Title</b>		<b>Phone No.</b>	<b>Email Address</b>	
William Cheesborough, Director of Finance and Administration		706-542-2373	wnc@uga.edu	
		<b>Signature</b>		
<b>Note: A Program Manager from the Office of Facilities at the System Office may contact you with further questions separate from the review of the new academic program.</b>				

## References

- Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-2017 Edition (2015), Career and Technical Education Teachers. Retrieved from <http://www.bls.gov/ooh/education-training-and-library/career-and-technical-education-teachers.htm>
- Chae, S. H., Kim, Y. D., & Lim, H. J. (2014). Analysis of the association between competence and performance—focusing on farms and extension workers. *American Journal of Agricultural and Biological Sciences*, 9(1), Doi:101-108. Doi:10.3844/ajabssp.2014.101.108
- Council of Graduate Schools and Education Testing Service (2012). *Pathways through graduate school and into careers*. Report from the Commission on Pathways through Graduate School and into Careers. Princeton, NJ: Educational Testing Service.
- Etling, A. W., & Radhakrishna, R. B. (1998). The evolution of a curriculum to prepare nonformal educators. *Journal of International Agricultural and Extension Education*, 5(1), 5-15. DOI: 10.5191/jiaee.1998.05101
- Foster, D. D., Lawver, R. G., & Smith, A. R. (2014). *National agricultural education supply and demand study*. American Association for Agricultural Education.
- Foster, D. D., Lawver, R. G., & Smith, A. R. (2015). *National agricultural education supply and demand study 2014 Executive summary*. Retrieved from [http://aaaeonline.org/resources/Documents/NSD%20Summary\\_2015.pdf](http://aaaeonline.org/resources/Documents/NSD%20Summary_2015.pdf)
- Georgia Department of Labor (2016). *Georgia's Hot Careers to 2022*. Workforce statistics and economic research. Retrieved from [https://explorer.gdol.ga.gov/mis/current/hot\\_careers\\_current.pdf](https://explorer.gdol.ga.gov/mis/current/hot_careers_current.pdf)
- Issahaku, A. (2014). *Perceived competencies of agriculture extension workers in extension services delivery in northern regions of Ghana: Perspective from literature*. *Developing Countries Studies*, 4(15), 107-114. [www.iiste.org](http://www.iiste.org).
- Khalil, B. A. N., Ismail, M., Suandi, T., & Silong, A. D. (2009). Human resource development competencies as predictors of agricultural extension agents in Nigeria [Abstract]. *Journal of Agricultural Education and Extension*. 6(4), 223-233.
- Liles, R. T., & Mustain, R. D. (2004). Core competencies: A system approach for training and organizational development in extension. *The Journal of Agricultural Education and Extension*. 10(2), 77-82.
- Lindner, J. R., Dooley, K. E., & Wingenbach, G. J. (2003). A cross-national study of agricultural and extension education competencies. *Journal of International Agricultural and Extension Education*, 10(1), Doi: 51-59. DOI: 10.5191/jiaee.2003.10107
- Maddy, D.J., Neimann, K., Lindquist, J., & Bateman, K. (2002). *Core competencies for the cooperative extension system*. Oregon State University Extension Service. [http://www.msuxextension.org/jobs/forms/Core\\_Competencies.pdf](http://www.msuxextension.org/jobs/forms/Core_Competencies.pdf).
- May, T. D. (2000). Elements of success in environmental education through practitioner eyes. *Journal of Environmental Education*, 31(3), 4-11.
- National Center for O\*NET Development. (2016). 25-9021.00. *O\*NET OnLine*. Retrieved from <http://www.onetonline.org/link/summary/25-9021.00>
- NEEAC. (2015). *Report to the U.S. Environmental Protection Agency Administrator*. National Environmental Education Advisory Council, Washington, D.C. Ohio State University. (2015). *Core competencies*. <http://extensionhr.osu.edu/compmodel/corecomp.html>



- Ostriker, J. P., Kuh, C. V., Voytuk, J. A. (2010). *A data-based assessment of research-doctorate programs in the United States*. National Research Council of the National Academies. Washington D.C.: The National Academies Press. DOI 10.17226/12994
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.
- Röling, N. G. (2004). *Communication for development in research, extension, and education*. Paper presented at the 9<sup>th</sup> UN Roundtable on Communication for Development, Rome.
- Shinn, G. C., Wingenbach, G. J., Briers, G. E., Lindner, J. R., & Baker, M. (2009). Forecasting doctoral-level content in international agricultural and extension education – 2010: Viewpoint of fifteen engaged international scholars. *Journal of International Agricultural and Extension Education*, 16(1), 57-71. DOI: 10.5191/jiaee.2009.16105
- Smith, J. A., Sitton, S., & Ramsey, J. (2012). Core components of a doctoral program in agricultural communications: A delphi national study. *NACTA Journal*. Retrieved from <https://www.nactateachers.org/images/stories/NACTA/Conference/2012/AB0345.pdf>
- Strong, R., & Harder, A. (2011). Recommended competencies needed for teaching in international extension settings. *Journal of International Agricultural and Extension Education*, 18(3), 72-83. Doi: 10.5191/jiaee.2011.18306
- Suvedi, M. (n. d.). Capacity building for agricultural knowledge management: Challenges facing the agricultural extension profession. Unpublished manuscript. East Lansing, MI: Department of Community Sustainability, Michigan State University.
- Swortzel, K. A. (2016). *American Association for Agricultural Education 2015-2016 Faculty Salary Report*. Mississippi State University. Retrieved from <http://aaaeonline.org/Salary-Reports>
- United States Bureau of Labor Statistics (2016). *Employment by detailed occupation*. Retrieved from [http://www.bls.gov/emp/ep\\_table\\_102.htm](http://www.bls.gov/emp/ep_table_102.htm)
- Vandenburg, L., & Foerster, K. (2008). *Core competencies in MSU extension*. East Lansing, MI: Michigan State University Extension.
- Vincent, S., & Focht, W. (2011). Interdisciplinary environmental education: Elements of field identity and curriculum design. *Journal of Environmental Studies and Sciences*, 1(1), 14-35.

**Available Upon Request**

**APPENDIX A. Letters of Support**

**APPENDIX B. Successful Ph.D. Dissertation Studies in ALEC**

**APPENDIX C. Hanover Report**

## **APPENDIX D.**

### **New Course Descriptions**

#### **AGCM 8100 - Culture-Centered Communication and Engagement (3 hours)**

##### **Course Description**

Explores the interaction of culture, structure, and agency in the purviews of communication and engagement activities in targeted communities. Topics are guided by critical theory and cultural studies in multiple contexts, including food production, food narratives, and community development.

##### **Course Objectives**

At the conclusion of this course, students will:

1. Understand the role of culture in the construction of communication.
2. Examine the role of critical theory in the context of food production, food narratives, and community development.
3. Understand the role of agricultural communication programs designed to address issues of food and community inequalities and structural disparities, paying attention to issues of social justice and structural transformation.
4. Develop an understanding of methodological tools that illuminate the epistemology of the critical-cultural approach to agricultural communication.

##### **Topical Outline**

1. Welcome, Introduction, and course overview
2. Culture, epistemology, and ontology
3. Culture and Critical Reflexivity
4. Culture, Identity, and Food
5. Culture, Modernity, and Food Production
6. Culture and Communities
7. Culture and Community Engagement
8. Culture, Structure, and Agency
9. Culture, Agricultural Communication, and Public Policy
10. Culture, Ways of Knowing, and Held Meanings
11. Culture and Held Meanings
12. Alternative ways of knowing
13. Agency in Food Practices and Narratives
14. Culture, Food, and Resistance
15. Culture and Coalition Building
16. Culture and Social Change

**Prerequisite: ALDR 7400E – Communication in Agricultural and Environmental Sciences (3 hours)**

### **Course Description**

Communication research related to social science theoretical frameworks and applied communication practices. Establishes communication research within social sciences, focuses on the development of communication research in the agricultural and environmental sciences, and critically examines current communication research in agricultural and environmental sciences. Exercises on academic writing in APA style.

### **ALDR 9000: Doctoral Research (1-9 hours)**

#### **Course Description**

Research while enrolled for a doctoral degree under the direction of faculty members. Independent research under the direction of a faculty member.

#### **Course Objectives**

Research while enrolled for a doctoral degree under the direction of faculty members. Independent research under the direction of a faculty member.

### **ALDR 9300: Doctoral Dissertation (1-9 hours)**

#### **Course Description**

Dissertation writing under the direction of the major professor. Independent research and preparation of the doctoral dissertation.

#### **Course Objectives**

Independent research and preparation of the doctoral dissertation.