



UNIVERSITY OF
GEORGIA

University Council

October 9, 2026

UNIVERSITY CURRICULUM COMMITTEE – 2026-2027

Rodney Mauricio, Chair

Agricultural and Environmental Sciences – Julie Campbell

Arts and Sciences – Casie LeGette (Arts)

Erin Dolan (Sciences)

Business – Andrew Miller

Ecology – Amanda Rugenski

Education – Melissa Freeman

Engineering – David Stooksbury

Environment and Design – Ryan Wright

Family and Consumer Sciences – Melissa Landers-Potts

Forestry and Natural Resources – Richard Chandler

Journalism and Mass Communication – Welch Suggs

Law – Joe Miller

Medicine – Erica Brownfield

Pharmacy – Duc Do

Public and International Affairs – Ryan Powers

Public Health – Heather Padilla

Social Work – Jennifer Elkins

Veterinary Medicine – Paul Eubig

Graduate School – Stacey Neuharth-Pritchett

Ex-Officio – Interim Provost Ron Walcott

Undergraduate Student Representative – Christa Patterson

Graduate Student Representative – Samuel Siaw

Dear Colleagues:

The attached proposal from the College of Agricultural and Environmental Sciences for a Graduate Certificate in CAES CLEAR - Communication and Leadership Excellence for Aspiring Researchers will be an agenda item for the October 16, 2026, Full University Curriculum Committee meeting.

Sincerely,

Rodney Mauricio, Chair

cc: Interim Provost Ron Walcott

Dr. Marisa Anne Pagnattaro

PROPOSAL FOR A CERTIFICATE PROGRAM

Date: March 9, 2026

School/College/Unit: College of Agricultural and Environmental Sciences

Department/Division: Agricultural Leadership, Education, and Communication

Certificate Title: CAES CLEAR - Communication and Leadership Excellence for Aspiring Researchers

CIP: 01080100

Effective Term: Spring 2027

Which campus(es) will offer this certificate? Athens

Level (Undergraduate, Graduate, or Post-Baccalaureate): Graduate

Program Abstract: The Graduate Certificate in CAES CLEAR - Communication and Leadership Excellence for Aspiring Researchers, referred to hereafter as the CAES CLEAR Certificate, offers graduate students—primarily in the applied natural sciences—the ability to develop themselves as strong leaders and communicators positioned for career success in industry or academia. Students will explore a variety of career options outside academia and develop proficiency in professional and targeted communication, self-awareness, workplace culture and etiquette, leadership and teamwork, and effective mentoring relationships. Students in the nine-hour certificate program will enroll in a core course covering basics of professional communication and subsequently enroll in a three-semester cohort program in which they learn personal styles of leadership and conflict resolution, implement these skills as members of interdisciplinary teams, develop career management strategies, and engage in mentorship relationships with successful graduate alumni. Students will also choose one course from a variety of elective courses in which they may choose to focus on teaching/academic topics, applied communication, or leadership. This program is designed to add to the existing curriculum of students within the College of Agricultural and Environmental Sciences who are completing their Ph.D. and wishing to bolster their likelihood of career success by building career competencies and soft skills necessary to succeed in the workplace, while students from other disciplines and colleges are welcome to apply. The program will utilize existing UGA courses, while adding three one-hour seminar credits and a core requirement to be taught by existing personnel. The Agricultural Leadership, Education, and Communication Department will be responsible for administration of the certificate program and teaching all required courses, as well as the elective courses.

1. Purpose and Educational Objectives

State the purpose and educational objectives of the program.

The purpose of the CAES CLEAR Certificate Program is to equip graduate students within the College of Agricultural and Environmental Sciences (CAES) who are adept at rigorous scientific research to confidently enter the workforce equipped with essential soft skills necessary to succeed in navigating professional dynamics beyond the academy. After completing the certificate program, graduate students will be able to:

- Discern the nuances of communication within professional environments and demonstrate the ability to communicate science with technical and non-technical audiences using evidence-based practices
- Identify personal collaboration, conflict resolution, and time and stress management styles and successfully apply this self-awareness in the workplace
- Successfully navigate job search campaigns and understand organizational culture for a variety of career pathways in their discipline
- Apply knowledge of team, conflict, leadership, and change scenarios in the workplace to effectively collaborate with and supervise others
- Pursue and engage in a purposeful and goal-driven mentoring relationships as both mentor and mentee

How does this program complement the mission of the institution?

The proposed certificate program complements the UGA mission to “prepare the University community and the state for full participation in the global society of the twenty-first century” by equipping CAES graduate students with the professional competencies essential to succeed in the modern business world. The certificate ensures student success by training them with the skills to lead others, while addressing complex agricultural and environmental challenges and communicating the importance of their cutting-edge research to various stakeholder audiences.

Additionally, the program aligns with UGA’s commitment “to teach, to serve, and to inquire into the nature of things” by offering applied learning opportunities and training in interdisciplinary collaboration. By involving students across diverse departments and teaching the skills necessary for the facilitation of successful interdisciplinary teams, the certificate program supports UGA’s goal of overarching goal of collaboration between units.

The certificate program also complements UGA’s goal to enhance external engagement by partnering students in the certificate program with industry mentors. The mentorship component connects existing students with alumni and industry professionals to showcase UGA research excellence, along with its contribution to intellectual and economic development as a land-grant institution.

Finally, the certificate program aligns with the 2027 strategic vision of the College of Agricultural and Environmental Sciences to become the No. 1 college of agriculture in the nation by building upon core values of innovation and leadership. It does so by seeking to create a forward-thinking curriculum that trains the next generation of agricultural scientists to lead with both impact and professionalism.

2. Need for the Program

Explain why this program is necessary.

Trust in science within the United States has suffered since the COVID-19 pandemic (Tyson & Kennedy, 2024), while food and agriculture systems face additional public scrutiny and varying levels of trust in an increasingly complex and globalized food system (Wu et al., 2021). Therefore, the next generation of agricultural scientists should be not only able to defend their research and its methodology but strategically communicate its importance to diverse audiences and provide leadership within the agricultural industry in an ever-changing global landscape.

Additionally, students in CAES pursue various career options in academia, government, industry, and NGOs in which leadership, communication, and professional skills are essential. However, many students enter the U.S. workforce without experience outside academia and lack knowledge of the interpersonal and professional skills, hereafter referred to as essential skills, necessary to succeed. Literature has indicated graduate students desire to gain essential skills; however, they struggle to think critically, work on teams, and “transfer their knowledge and skills effectively in work-related situations” (Zahir, 2023, p. 73). Therefore, an application-based program is necessary, in which students not only become cognitively aware of essential skills but develop behavioral competencies to practically apply essential skills in real-world situations.

The application-based certificate program will fill a gap by offering a unique combination of leadership development and communication curriculum tailored to CAES graduate students. Other leadership-based opportunities exist for UGA graduate students, including certificates in complexity leadership¹, organization coaching², entrepreneurship³, nonprofit management and leadership⁴, a portfolio in community engagement⁵, and the GradLEAD⁶ semester-long professional development experience. Science communication opportunities include graduate certificates in crisis, risk, disaster communications⁷ and science and health communication⁸. However, existing programs are not designed for students in applied natural sciences, thus creating a barrier to entry for CAES students who are interested in relevant, discipline-specific training. By creating a targeted certificate tailored to CAES graduate student needs, students

¹ <https://coe.uga.edu/academics/non-degree/graduate-certificate-complexity-leadership/>

² <https://coe.uga.edu/academics/non-degree/graduate-certificate-organization-coaching/>

³ <https://www.terry.uga.edu/certificates/entrepreneurship/>

⁴ <https://ssw.uga.edu/degrees-programs/certificates/nonprofit-management-leadership/>

⁵ <https://servicelearning.uga.edu/student-resources/graduate-portfolio/>

⁶ <https://grad.uga.edu/gradlead-new-graduate-student-leadership-development-program/>

⁷ <https://grady.uga.edu/certificates/graduate-certificate-in-crisis-risk-and-disaster-communication/>

⁸ <https://comm.uga.edu/graduate-certificates>

will be more likely to enroll and engage in training advantageous in a competitive professional landscape.

Feedback from employers of CAES alumni and stakeholders highlights the need for essential skills to ensure a smooth transition of graduate students into industry roles. Several industry leaders enthusiastically support the development of the certificate program. For example, Masha Trenhaile, Head of University Strategy and Outreach at Bayer, says, “Initiatives like this play a critical role in preparing students to transition from academia to industry by providing invaluable experiential learning and professional skill development. Through training in effective communication, impactful leadership, and change management, students gain the essential competencies needed to succeed and thrive in today’s rapidly evolving industry landscape.” Viren Shah, Chief Digital Information Officer at AGCO Corporation, says, “AGCO’s Farmer-First strategy keeps farmers at the heart of agricultural innovation. UGA CAES’s Leadership Certificate equips PhD graduates with the leadership and communication skills to turn research into on-farm impact, exactly what our industry needs to sustainably feed the world.” Mike Giles, President of the Georgia Poultry Federation, adds, “While Georgia is the nation's leader in producing chicken, we are really in the people business like many other industry sectors. To thrive in the decades to come, our industry needs professionals across all disciplines who will be able to communicate, lead, and work collaboratively with team members. We believe that the UGA CAES proposed leadership certificate program will provide a much-needed additional level of preparation for graduate students entering the workforce.”

Additionally, market research supports the need for training in professional skills for doctoral graduates. The U.S. food, agriculture, renewable natural resources, and environmental workforce encompasses diverse careers in science and engineering, business and management, production, education, communication, and government. USDA/NIFA projects approximately 104,766 annual employment opportunities in these fields from 2025-2030, underscoring the need for graduates with not just disciplinary expertise, but communication and leadership skills for interdisciplinary, organizational, and stakeholder-facing environments (Wilson et al., 2025).

Among agriculture field doctorates, industry has become an increasingly common destination. In 2024, 40% of U.S. doctorate recipients went into industry/business (National Center for Science and Engineering Statistics, 2026). A 2024 National Science Foundation study additionally reported industry partners are looking for recent Ph.D. graduates with strong technical capabilities, but that they are even more focused on their capacity to collaborate, negotiate, and lead ([National Science Foundation](#), 2024).

A survey of engineering Ph.D. graduates working in industry reported on the most valuable skills for entry-level industry Ph.D. graduates: working independently, working in teams, written and oral communication, and problem solving (Watson & Lyons, 2011). Another industry-focused study published in the National Library of Medicine explored the skills employers seek in pharmaceutical science doctoral graduates and concluded that industry wants Ph.D. graduates who can do more than write a scientific paper. They want researchers who can explain their work to non-specialists, make a case for its impact, write reports for

decision makers, give concise presentations to senior leadership, listen to the needs of clients and stakeholders, and other related communication competencies. Further, all of the industry experts surveyed noted multidisciplinary collaboration skills as critical for success (McLaughlin et al., 2019).

The proposed certificate program is intended to equip CAES graduate students with the ability to communicate their research, excel in navigating and leading interdisciplinary teams, and enter the professional workforce with ease. The mentorship component embedded within the certificate program will also connect current students to industry professionals with similar professional interests, both creating connections between CAES and industry partners and equipping students to seek, maintain, and facilitate meaningful mentor-mentee relationships.

In addition, provide the following information:

- a. Semester/Year of Program Initiation:** Spring 2027
- b. Semester/Year of Full Implementation of Program:** Fall 2028
- c. Semester/Year First Certificates will be awarded:** Fall 2028
- d. Annual Number of Graduates expected (once the program is established):** 20
- e. Projected Future Trends for number of students enrolled in the program:** 20-40

3. Student Demand

- a. Provide documentation of evidence of student demand for this program, including a student survey.*

Graduate students across the College of Agricultural and Environmental Sciences may be interested in the proposed certificate program, especially those who are entertaining careers in industry or international students who would like to remain in the U.S. and understand cultural norms of communication and professionalism. International students comprised approximately 48% of total graduate student enrollment in CAES during the fall 2025 semester.

A student survey was distributed to all graduate students within the College of Agricultural and Environmental Sciences over the graduate student listserv during November 2025. Ninety-nine (99) students responded (70 Ph.D. students and 29 master's students). The statistics are summarized below.

Interest Statement	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
If the certificate is created, I would consider pursuing it.	5 (5.1%)	5 (5.1%)	6 (6.1%)	39 (39.4%)	44 (44.4%)
This certificate would provide skills I anticipate needing in my work after graduation.	6 (6.1%)	0 (0.0%)	8 (8.1%)	37 (37.4%)	48 (48.5%)

It is important to me that the certificate provides training to help me pursue a career in industry .	5 (5.1%)	8 (8.1%)	8 (8.1%)	28 (28.3%)	50 (50.5%)
It is important to me that the certificate provides training to help me pursue a career in academia .	5 (5.1%)	6 (6.1%)	17 (17.2%)	32 (32.3%)	39 (39.4%)

b. Provide evidence that demand will be sufficient to sustain reasonable enrollment.

The College of Agricultural and Environmental Sciences offers 19 master's degree paths and 12 doctoral degree paths across 10 departments and institutes. Total graduate student enrollment in fall 2025 was 757. It is expected that at least one student from each department will be interested in pursuing the certificate program within the first year. To encourage enrollment and generate interest for the first cohort, departments within CAES will be asked to nominate a student who would benefit from this program based on their professional aspirations and progress in their degree program. The graduate certificate program will be open to other interested students within CAES and in related disciplines, provided they submit a strong application and meet with Academic Professional Associate who serves as the certificate program coordinator to confirm their fit in the program. After successful completion of the certificate program by the first cohort, the faculty anticipate 20-40 students will be enrolled at a time.

Given the results of the survey listed above, it appears student interest exists across the College of Agricultural and Environmental Sciences, and there will be sufficient demand to sustain the certificate program, especially among doctoral students who made up 72% of respondents to the survey.

4. Program of Study

Provide a detailed program of study for the certificate program, including:

- a. Specific course prefixes, numbers, and titles*
- b. Identify any new courses created for this program*

The program of study will utilize one existing three-hour course and three new one-hour courses to be developed and taught by the Academic Professional Associate who was hired to direct the certificate program and teach the cohort-based programming for the certificate. The program of study will also require at least one three-hour elective. The program will utilize existing UGA courses and instructors for electives options. Electives will be select classes in the Department of Agricultural Leadership, Education, and Communication, given the expertise of faculty members in topics germane to professional development, communication, leadership, and teaching. To complete the CAES CLEAR Certificate, students will complete a minimum of nine credit hours.

Required Courses (6 hours)

ALDR 6820, Advanced Business, Professional, and Leadership Communication (3 hours) – **NEW**

ALDR 8000, Individual Leadership and Communication for Researchers (1 hour) – **NEW**

ALDR 8010, Team Leadership and Communication for Researchers (1 hour) – **NEW**

ALDR 8020, Capstone in Leadership and Communication for Researchers (1 hour) – **NEW**

Electives (3 hours)

Choose one course from any of the following groups.

Academia Electives

- ALDR 6080, Agriculture and Extension Administration (3 hours)
- ALDR 6700E, Introduction to Extension and Engagement (3 hours)
- ALDR(AGED)(AGCM) 6800E, Grantseeking (3 hours)
- ALDR 7230, Adult Education (3 hours)
- ALDR 8210, Professional Writing Skills for Agricultural Scientists (3 hours)

Applied Communication Electives

- AGCM 6200S, Digital Engagement Strategies in Agricultural and Environmental Sciences (3 hours)
- AGCM 7600, Digital Storytelling of Agricultural and Environmental Science Issues (3 hours)
- AGCM 8700, Communication about Agricultural and Environmental Scientific Innovation (3 hours)
- AGCM 8750, Effectively Communicating about Emerging Agricultural and Environmental Science Issues (3 hours)

Leadership Theory Electives

- ALDR 6540, Advanced Leadership Theory, Ethics, and Culture (3 hours)
- ALDR 6620, Global Leadership: Strategies for Leading Across Cultural Differences (3 hours)
- ALDR 7340, Collaborative Problem Solving and Preferences for Change (3 hours)
- ALDR 8110, Application of Advanced Leadership Theories (3 hours)
- ALDR 8310, Leading Volunteers in Agricultural and Environmental Sciences (3 hours)

Total = 9 hours

Three credit hours will be required in the new course, ALDR 6820, Advanced Business, Professional, and Leadership Communication. During ALDR 6820, students will be introduced to concepts of interpersonal communication, creating targeted communication materials for various audiences, making business presentations, understanding the job search campaign process, navigating workplace etiquette and culture, and managing leadership and conflict styles.

Students will also be required to complete three credit hours by participating in three new one-hour courses designed to provide them with cognitive understanding and practical applications of professional concepts. Students will enroll in the one-hour courses with members of a cohort who will remain consistent with them throughout the completion of the program. The cohort structure provides students with the opportunity to practice establishing interdisciplinary networks and working across consistent interdisciplinary teams, as required in both industry positions and federal grantsmanship. Students will learn the following concepts in their cohort classes:

ALDR 8000, Individual Leadership and Communication for Researchers (1 hour)

- Cohort Seminar 1
 - Course Description: Self-awareness and foundational skills in leadership and communication. Discover and apply personal styles of conflict resolution, collaboration, and time and stress management to support research career success while exploring various professional pathway options.
 - One-hour cohort-based course covering the following competencies:
 - Awareness of personal communication, collaboration, and conflict resolution styles
 - Networks of support
 - Time and stress management practices
 - Leadership styles
 - Professional pathway exploration
 - Being an effective mentee – initial connection with mentor through UGA Mentor Program

ALDR 8010, Team Leadership and Communication for Researchers (1 hour)

- Cohort Seminar 2
 - Course Description: Leadership and communication within interdisciplinary teams. Focuses on feedback exchange, mentoring strategies, research-policy connections, and professional development through creation of an individual development plan.
 - 1-hour cohort-based course covering the following competencies:
 - Team and conflict management
 - Workplace etiquette and culture
 - Understanding research and policy
 - Working on interdisciplinary teams
 - Receiving and providing feedback
 - Successful mentoring
 - Creation of an Individual Development Plan (IDP) with mentor

ALDR 8020, Capstone in Leadership and Communication for Researchers (1 hour)

- Cohort Seminar 3 (Capstone)

- Course Description: Capstone experience applying leadership and communication skills. Includes intercultural communication, organizational change, science communication campaigns, job search strategies, and implementation of an individual development plan.
- 1-hour cohort-based course covering the following competencies:
 - Intercultural communication
 - Navigating organizational change in the workplace
 - Job search campaigns (material creation for positions of interest)
 - Team and conflict management simulations
 - Science communication campaign for target audiences (including 3 Minute Thesis competition submission)
 - Implementation of IDP with mentor

The mentorship component of the proposed courses will be fulfilled by connecting with a seasoned mentor. The connection will be facilitated by the Academic Professional Associate coordinator of the graduate certificate program and the UGA CAES Director of Industry Partnerships and Project-Based Learning. The mentor will be a professional whose career expertise aligns with student's aspirations, has at minimum 10 years of industry experience, and possesses formal or informal leadership experience. Mentors will be recruited by utilizing the existing pool of CAES alumni and affiliates enrolled in the UGA Mentor Program, as well as selected contacts identified and recruited by the CAES Office of Development and Alumni Relations who meet the qualifications. The mentor recruitment process will be ongoing. Once students for each cohort and their mentors are identified, the mentors will receive training from the CAES Director of Industry Partnerships and Project-Based Learning regarding their mentorship responsibilities.

The mentoring portion of the certificate program will require students to learn how to cultivate meaningful mentorship relationships, reflect on how to become an effective mentor, and create and implement individual development plans with their mentor over three semesters of connection. In ALDR 8000, students will first connect with a mentor and learn about taking ownership of the mentor-mentee relationship by scheduling at least four virtual or in-person meetings and asking appropriate introductory questions regarding career goals, mentor expertise, and the personal strengths and weaknesses they discover in the course. In meetings with their mentor held during the time in which they are enrolled in ALDR 8010, students will focus on supervising/mentoring others and creating a professional individual development plan (IDP) with their mentor. In ALDR 8020, students will implement and evaluate their IDP alongside their mentor, assess their career goals and competencies through the lens of the IDP, identify next steps with mentor guidance, and learn how to effectively and professionally end a formal mentorship relationship.

5. Model Program and Accreditation

a. Identify any model programs, accepted disciplinary standards, and accepted curricular practices against which the proposed program could be judged. Evaluate the extent to

which the proposed curriculum is consistent with these external points of reference and provide a rationale for significant inconsistencies and differences that may exist.

The competencies for this program were modeled after leadership development programs for graduate students, primarily the Foundation for Food and Agricultural Research (FFAR) Fellowship⁹ and the Princeton University GradFUTURES¹⁰ program. Competencies were also derived from the National Postdoctoral Association’s list of core competencies that should be acquired upon completion of a postdoctoral program¹¹.

The FFAR Fellowship and Princeton University GradFUTURES program are well-established entities providing graduate students with the opportunity to develop professionally and incorporate their personal research agendas and career goals.

The FFAR Fellowship is a prestigious program in which students receive funding toward their graduate research, interact with an interdisciplinary cohort of graduate students from various institutions, and engage in mentorship relationships and completions of individual development plans with mentors and advisors. Students selected for the three-year fellowship participate in virtual sessions, meet in-person yearly, and are trained in professional development sessions covering a wide range of topics from self-management and assessment to understanding policy and science to grasping business concepts. The proposed graduate certificate adopts the same cohort-based model to bring interdisciplinary students together to improve professional competencies and facilitate meaningful mentorships. The proposed certificate program will offer an official certificate added to students’ transcripts that signals workforce readiness to employers.

The Princeton University GradFUTURES program is based eight competencies including “Writing & Public Speaking,” “Teaching & Mentoring,” “Research & Data Analysis,” “Personal Well-Being & Effectiveness,” “Leadership & Collaboration,” “Innovation & Entrepreneurship,” Diversity, Equity, & Inclusion,” and “Career Management” (GradFUTURES, 2026, Eight Core Competencies section). Princeton GradFUTURES offers a wide range of workshops, lectures, seminar series, internships, fellowships, and mentorship opportunities for graduate students across the university with an emphasis on building skills and engaging in experiential learning. While students do not receive academic credit for participation in these programs, involvement in interdisciplinary learning cohorts and successful completion of assignments earn students micro-credentials in the area of focus. The proposed certificate program will incorporate this interdisciplinary cohort approach and provide enrolled students with three semesters of professional development and a capstone experience.

Some topics offered by Princeton GradFUTURES (e.g., research skills, DEI, entrepreneurship) were deemed to be discipline-specific or outside the scope of the proposed certificate program. While the proposed certificate program offers experience in mentoring,

⁹ <https://ffarfellows.org/>

¹⁰ <https://gradfutures.princeton.edu/>

¹¹ <https://www.nationalpostdoc.org/page/CoreCompetencies>

teaching skills are not included as a core competency. While not necessary for all certificate participants, developing an optional path for teaching competency could be beneficial for students interested in pursuing careers in academia. Therefore, the proposed certificate contains optional electives for students interested in pursuing careers in academia.

Finally, many other colleges of agricultural and natural resources across the country offer graduate programs in communication or leadership (e.g., University of Florida¹², Purdue University¹³, North Carolina State University¹⁴, Texas A&M¹⁵, Texas Tech¹⁶). However, these programs do not include a mentorship component, incorporate an interdisciplinary cohort experience, or combine communication and leadership. The faculty anticipate the proposed certificate program will provide a unique advantage to UGA CAES students.

b. If program accreditation is available, provide an analysis of the ability of the program to satisfy the curricular standards of such specialized accreditation.

Program accreditation is not available.

6. Student Learning Outcomes

Describe the proposed learning outcomes for the certificate program.

Certificate objectives intended to provide students with skills in six competency areas. The proposed certificate program learning outcomes align with the overarching competencies. Upon completion of the certificate program, students will be able to:

- Communication (SLO 1-4)
 1. Critically evaluate and adapt interpersonal communication strategies to manage professional relationships in diverse workplace settings
 2. Identify non-technical audience knowledge levels and viewpoints to design and deliver targeted science communication materials
 3. Design and deliver targeted, persuasive multimedia presentations using professional visual aids and evidence-based speaking techniques
 4. Demonstrate knowledge of intercultural differences in the workplace and revise communication and behavior accordingly
- Self-Awareness (SLO 5-7)
 5. Identify personal communication, collaboration, and conflict resolution styles and apply knowledge to interactions in professional settings
 6. Demonstrate effective time and stress management practices applicable in the professional workplace

¹² <https://aec.ifas.ufl.edu/graduate/graduate-certificates/>

¹³ <https://ag.purdue.edu/department/asec/graduate/gradcertprogram.html>

¹⁴ <https://online-distance.ncsu.edu/program/leadership-in-agriculture-and-human-sciences/>

¹⁵ <https://catalog.tamu.edu/graduate/colleges-schools-interdisciplinary/agriculture-life-sciences/agricultural-leadership-education-communications/leadership-education-theory-practice-certificate/index.html#text>

¹⁶ https://catalog.ttu.edu/preview_program.php?catoid=11&poid=8907&hl=Agricultural+Communications+Leadership
[ip](#)

7. Formulate personal methods for receiving feedback from supervisors/ mentors and providing feedback to those whom they supervise
- Career Management (SLO 8-13)
 8. Compare and contrast various professional pathways within academia and industry while identifying skills required to pursue each pathway
 9. Successfully execute networking, application, and interview processes as part of a job search campaign (academic, industry, governmental, or NGO)
 10. Identify processes for establishing peer, mentor, and professional networks of support for professional well-being
 11. Discuss dynamics of U.S. research and policy and compose a plan for communicating the importance of their research agenda with policymakers
 12. Illustrate the importance of cultivating healthy, ethical workplace culture and etiquette
 13. Interact with cohort members, university leaders, and mentors using proper workplace etiquette
 - Leadership and Team Skills (SLO 14-18)
 14. Evaluate various models of team and conflict management in the workplace and identify the professional situations in which they would be most effective
 15. Practice complex team and conflict management simulations and the workplace and revise behavior based on feedback
 16. Compare and contrast various leadership styles and personal leadership style experiences and preferences
 17. Interact with other experts and effectively demonstrate disciplinary expertise while working on an interdisciplinary team
 18. Discuss the implications of navigating organizational change in the workplace across various career paths
 - Mentoring and Mentorship (SLO 19-21)
 19. Develop a mentorship/leadership philosophy for supervising and mentoring other scholars and peers
 20. Engage in and cultivate an ongoing mentorship relationship with an experienced professional in student's career pathway(s) of interest
 21. Set and achieve career-focused, measurable goals with mentor and advisor through the creation and implementation of an individual/professional development plan

Mapping of Student Learning Outcomes to Required Courses

Course Number	ALDR 6820	ALDR 8000	ALDR 8010	ALDR 8020
SLO 1	•	•		
SLO 2	•			•
SLO 3	•			•
SLO 4				•
SLO 5		•		
SLO 6		•		
SLO 7			•	
SLO 8		•		
SLO 9	•			•
SLO 10		•		
SLO 11			•	
SLO 12	•		•	
SLO 13	•		•	
SLO 14	•	•	•	•
SLO 15				•
SLO 16		•		
SLO 17			•	
SLO 18				•
SLO 19			•	
SLO 20		•		
SLO 21			•	•

Mapping of Student Learning Outcomes to Elective Courses

Course Number	AGCM 6200S	AGCM 7600	AGCM 8700	AGCM 8750	ALDR 6080	ALDR 6700E	ALDR 6800E	ALDR 7230	ALDR 8210	ALDR 6540	ALDR 6620	ALDR 7340	ALDR 8110	ALDR 8310
SLO 1	•									•				
SLO 2		•	•	•				•	•					
SLO 3	•	•	•		•	•	•	•	•					
SLO 4								•		•	•		•	
SLO 5										•	•	•		
SLO 6				•										
SLO 7	•		•					•	•					
SLO 8			•											
SLO 9														
SLO 10														
SLO 11			•	•			•		•					
SLO 12										•			•	
SLO 13														
SLO 14				•				•			•	•	•	•
SLO 15														
SLO 16					•	•				•	•	•	•	
SLO 17			•	•										
SLO 18												•		
SLO 19														•
SLO 20														
SLO 21														

7. Assessment and Admissions

Describe how the learning outcomes for the program will be assessed. Describe the process and criteria for how students will be admitted to and retained in the program.

Student Assessment

Students will achieve a variety of cognitive and behavioral outcomes upon completion of the certificate program and will, therefore, be assessed in a variety of manners.

1. **Self-Reflections:** Throughout their required courses, students will complete at least one self-reflection assignment per course on the competencies they have learned and how they will apply these competencies in their current work and future careers. Because concepts such as personal communication, collaboration, and conflict management styles are unique to individuals, self-reflections will be an integral element of the program and encourage them to take ownership of and apply these concepts according to personal professional aspirations.
2. **Peer Reviews and Critiques:** Students will interact with interdisciplinary certificate program participants in their cohort to learn how to give and receive feedback. Peer feedback will be incorporated into every required course to ensure students are adept at navigating differing opinions and styles of critiques. Criteria for assessment will include application of course concepts across all semesters, professionalism, and use of science communication skills.
3. **Instructor Assessments:** Faculty will evaluate student success by participation in course activities, engagement with guest speakers, application of assignments to real-world scenarios, and overall development in certificate competencies.
4. **Individual Project Assessments:** Throughout the certificate program, students will be tasked with completing projects that apply course concepts to personal goals. Projects may include creating an online professional presence, defining and exploring non-academic careers in which they could apply their expertise, writing a personal leadership or communication philosophy, or communicating their scientific expertise with a variety of target audiences. Criteria for assessment will include application of course concepts, applicability to students' career aspirations, and overall professionalism.
5. **Team Assessments:** Students will be evaluated on their ability to apply both professionalism and teamwork skills learned in the program to interdisciplinary team projects. Criteria for assessment will include contribution to the team objective, ability to translate disciplinary knowledge to peers, and application of course concepts. Students will have the opportunity to assess themselves and their peers, while the instructor will also offer assessment based on observations.
6. **Mentorship Assessments:** Students will be evaluated on successfully maintaining a mentor relationship with their assigned mentor for the prescribed amount of time. Criteria for assessment will include meeting with the mentor the directed number of times, a reflection on lessons learned from the mentor, and mentor's feedback on student engagement.
7. **Individual Development Plans:** Students will be evaluated on their ability to create and execute an individual development plan with measurable and achievable goals alongside

their mentor and advisor. Criteria for assessment will include specificity of goals and progress toward achievement upon completion of the certificate program.

Student Admission and Retention

To encourage initial interest in the certificate program, faculty will seek nominations via CAES department heads for the first two cohorts of students admitted to the program. The faculty anticipate the first students will pilot the certificate program and allow for the development of professional mentor connections at a sustainable rate.

The opportunity to apply for the certificate program will be offered to interested students across CAES and related disciplines. Students who have taken the required 3-hour ALDR 6820, Advanced Business, Professional, and Leadership Communication course will be given priority. ALDR 6820 will be open to all graduate students. Students will complete an application indicating their interest in the program, research focus, and career goals by a designated deadline. Interested students will then meet with the Academic Professional Associate who coordinates the proposed certificate program to discuss the expectations and requirements of the program, as well as student fit. For example, if the student has only one year left in their degree program and cannot complete the entire certificate, they will not be admitted. Additionally, doctoral students will be given priority over master's students, as this certificate is primarily aimed at doctoral students. Students must be degree-seeking to pursue the certificate. Yearly admissions into the certificate program will be dependent upon space in the cohort and availability of professional mentors. While the certificate is targeted to CAES graduate students, the faculty anticipate that it will be possible to open the certificate to graduate students in related disciplines in the future.

Students will be retained through consistent communication with the Academic Professional Associate including meeting once each semester to discuss professional goals and progress within the program. Enrollment in cohort classes throughout their time in the program is also intended to build relationships and accountability with other certificate students. Finally, students enrolled in the certificate program will have the opportunity to make industry and alumni network connections through special events facilitated by certificate administrators, thus encouraging their continued engagement.

References

- GradFUTURES. (2026). *Professional competency model*.
<https://gradfutures.princeton.edu/sharpen-skills/professional-competency-model>
- McLaughlin, J. E., Minshew, L. M., Gonzalez, D., Lamb, K., Klus, N. J., Aubé, J., Cox, W., & Brouwer, K. L. R. (2019). Can they imagine the future? A qualitative study exploring the skills employers seek in pharmaceutical sciences doctoral graduates. *PLoS ONE*, 14(9), <https://doi.org/10.1371/journal.pone.0222422>
- National Center for Science and Engineering Statistics. (2026). *Doctorate recipients from U.S. universities: 2024* (NSF 26-315). U.S. National Science Foundation.
<https://nces.nsf.gov/pubs/nsf26315>.

- National Science Foundation. (2024). *Catalyzing change in STEM graduate education: The power of “use-inspired” research*.
<https://www.nsf.gov/funding/initiatives/ige/updates/catalyzing-change-stem-graduate-education-power-use-inspired>
- Tyson, A., & Kennedy, B. (2024). *Public trust in scientists and views on their role in policymaking*. PEW Research Center.
<https://www.pewresearch.org/science/2024/11/14/public-trust-in-scientists-and-views-on-their-role-in-policymaking/>
- Watson, J., & Lyons, J. S. (2011, June). A survey of essential skills for Ph.D. engineers in industry. In *2011 ASEE Annual Conference & Exposition*. ASEE Conferences.
<https://doi.org/10.18260/1-2--17397>
- Wilson, C. A., Akridge, J. T., Brewer, B. E., Martin, S. S., & Strine, J. L. (2025). *Employment opportunities for college graduates in food, agriculture, renewable natural resources and the environment — United States, 2025-2030*. United States Department of Agriculture’s National Institute of Food and Agriculture and Purdue University.
<https://www.purdue.edu/usda/employment/>
- Wu, W., Zhang, A., Van Klinken, R. D., Schrobback, P., & Muller, J. M. (2021). Consumer trust in food and the food system: A critical review. *Foods*, 10(10), 2490.
<https://doi.org/10.3390/foods10102490>
- Zahir, H. M. (2023). Soft skills development through active learning in postgraduate studies: An action research study authors. 7(2), 73–94. <https://doi.org/10.55712/ijrsri.v7i2.70>



AGCO Corporation

4205 River Green Parkway, Duluth, 30096 USA

Tel +770-813-6161 Fax +770-813-6140 www.agcocorp.com

University Curriculum Committee
The University of Georgia
Athens, Georgia

Dear Members of the Curriculum Committee:

On behalf of AGCO, I am pleased to offer our strong support for the proposed **Communication and Leadership Excellence for Aspiring Researchers (CLEAR) Graduate Certificate** within the College of Agricultural and Environmental Sciences at the University of Georgia.

As a global leader in the design, manufacture, and distribution of agricultural machinery and technology solutions, AGCO operates at the intersection of agriculture, science, engineering, technology, and business. Our industry increasingly depends on professionals who can combine deep technical expertise with the ability to communicate effectively, collaborate across disciplines, lead projects and teams, and translate complex information into practical solutions for customers and other stakeholders.

These capabilities are particularly important for professionals entering today's agricultural technology workforce. Employees may be called upon to work with researchers, engineers, producers, dealers, customers, business leaders, and other partners, often across organizational and geographic boundaries. Success requires more than disciplinary knowledge. Professionals must be able to explain complex technical concepts to audiences with different levels of expertise, build productive relationships, work effectively on multidisciplinary teams, and exercise sound judgment as technologies, markets, and customer needs evolve.

The CLEAR Graduate Certificate represents a valuable approach to developing these complementary professional capabilities among graduate students. By intentionally integrating communication and leadership development with advanced disciplinary education, the program can help prepare graduates to transition more successfully into professional environments where they will be expected to contribute immediately, collaborate effectively, and take increasing responsibility for projects and teams.

We are particularly supportive of the certificate's emphasis on engagement with experienced professionals outside the university. Meaningful interaction with industry professionals can provide graduate students with valuable insight into workplace

expectations, organizational culture, career opportunities, and the practical application of their technical expertise. These experiences can help students develop both the confidence and professional perspective needed to succeed in industry and other career settings. We believe industry organizations such as AGCO can play a meaningful role in providing this perspective through mentoring and other forms of engagement with certificate students.

Agriculture is undergoing significant technological and organizational change. Precision agriculture, automation, data-driven decision-making, connectivity, artificial intelligence, and other emerging technologies are changing how agricultural systems operate and how professionals work with one another. Addressing these opportunities requires individuals who can bridge disciplinary boundaries, communicate effectively, and lead collaboratively. Developing this combination of technical and professional capability will strengthen the talent pipeline available to agricultural technology companies and other organizations throughout Georgia and beyond.

The University of Georgia has a strong tradition of preparing scientists, researchers, and professionals who contribute to the agricultural sector. The CLEAR Graduate Certificate can further enhance that preparation by helping graduates develop the communication and leadership capabilities that complement their advanced technical training and make them more effective contributors in the workplace.

For these reasons, AGCO enthusiastically supports the proposed CLEAR Graduate Certificate and encourages the University Curriculum Committee to approve the program. We believe the certificate will benefit participating students while also helping address the evolving workforce needs of agriculture and the agricultural technology industry.

Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "Matt Rushing", with a stylized, cursive script.

Matt Rushing
AGCO Corporation
UGA IIPA Industry Advisory Board Member

10/6/2026

University Curriculum Committee
The University of Georgia
Athens, Georgia



Dear Members of the Curriculum Committee:

On behalf of Bayer, I am pleased to offer our strong support for the proposed **Communication and Leadership Excellence for Aspiring Researchers (CLEAR) Graduate Certificate** within the College of Agricultural and Environmental Sciences at the University of Georgia.

Bayer's work in agriculture depends on bringing together scientific expertise, technological innovation, and an understanding of the needs of farmers and the broader agricultural community. As agricultural challenges become increasingly complex, organizations need professionals who can do more than excel within their individual disciplines. They must be able to communicate scientific information clearly, collaborate across disciplines and functions, build productive relationships, and lead initiatives that translate research and innovation into practical solutions.

These capabilities are particularly important for graduate students preparing to enter today's agricultural and life-sciences workforce. Professionals may work with scientists, farmers, agronomists, engineers, business leaders, regulators, policymakers, customers, and other stakeholders. Each audience brings different priorities, levels of technical knowledge, and perspectives. The ability to communicate effectively across those differences is essential to building trust, supporting informed decision-making, and moving innovative ideas from research into practice.

The CLEAR Graduate Certificate represents a valuable opportunity to complement advanced disciplinary education with the communication and leadership capabilities that employers increasingly seek. Graduate students who develop these skills will be better prepared to explain complex scientific concepts to diverse audiences, contribute effectively to multidisciplinary teams, manage projects, navigate organizational change, and assume leadership responsibilities as their careers progress.

We are particularly supportive of the certificate's emphasis on meaningful engagement with experienced professionals outside the university. Industry interaction can give graduate students a clearer understanding of workplace expectations, organizational culture, career opportunities, and the practical challenges involved in applying scientific knowledge in professional settings. We believe that engagement between industry professionals and certificate students can provide valuable perspectives as students prepare for careers in agriculture, life sciences, research, and related fields.

The future of agriculture will require professionals who can work across traditional disciplinary boundaries and connect scientific discovery with practical application. Advances in areas such as digital agriculture, data science, biotechnology, crop protection, and other emerging technologies create tremendous opportunities, but

//////////

October 6, 2026

Masha Trenhaile
Global Head of University
Strategy and Outreach, Breeding
Crop Science R&D
700 Chesterfield Parkway W
Chesterfield, MO 63017

Cell +1-217-390-8623
Email:
masha.trenhaile@bayer.com

www.bayer.com



Page 2 of 2

realizing those opportunities requires effective communication, collaboration, and leadership. Professionals who can bridge science and application will be particularly valuable to organizations working to address the complex challenges facing agriculture and society.

The University of Georgia has a long-standing reputation for preparing outstanding scientists, researchers, and professionals who contribute to agriculture and the life sciences. The CLEAR Graduate Certificate can further strengthen that preparation by equipping graduate students with professional capabilities that complement their advanced technical expertise and increase their effectiveness in a wide range of career settings.

For these reasons, Bayer enthusiastically supports the proposed CLEAR Graduate Certificate and encourages the University Curriculum Committee to approve the program. We believe the certificate will benefit participating students while helping strengthen the pipeline of highly skilled professionals prepared to contribute to the future of agriculture, science, and innovation.

Thank you for your consideration.

Sincerely,

Masha Trenhaile



October 6, 2026

Masha Trenhaile
Global Head of University
Strategy and Outreach, Breeding
Crop Science R&D
700 Chesterfield Parkway W
Chesterfield, MO 63017

Cell +1-217-390-8623
Email:
masha.trenhaile@bayer.com

www.bayer.com

Documentation of Approval and Notification

Proposal: Graduate Certificate in CAES CLEAR - Communication and Leadership Excellence for Aspiring Researchers

College: College of Agricultural and Environmental Sciences

Department: Agricultural Leadership, Education, and Communication

Proposed Effective Term: Spring 2027

School/College:

- College of Agricultural and Environmental Sciences Dean, Dr. Nick T. Place, 8/26/2026
- College of Agricultural and Environmental Sciences Associate Dean, Dr. Manpreet Singh, 8/26/2026
- Graduate School Interim Dean, Dr. Anne Shaffer, 9/18/2026
- Head of the Department of Agricultural Leadership, Education, and Communication, Dr. Jennifer Waldeck, 3/1/2026

Notification:

- Head of the Department of Entomology, Dr. Sonia Altizer, 9/24/2026
- Head of the Department of Poultry Science, Dr. Todd Applegate, 9/24/2026
- Franklin College of Arts and Sciences Associate Dean, Dr. Dan Bara, 9/24/2026
- Head of the Department of Plant Pathology, Dr. Marin Brewer, 9/24/2026
- Head of the Department of Plant Biology, Dr. John Burke, 9/24/2026
- Head of the Department of Agricultural and Applied Economics, Dr. Greg Colson, 9/24/2026
- Head of the Department of Food Science and Technology, Dr. Faith Critzer, 9/24/2026
- Head of the Department of Marine Sciences, Dr. Daniela Di Iorio, 9/24/2026
- Head of the Department of Genetics, Dr. Kelly Dyer, 9/24/2026
- Head of the Department of Animal and Dairy Science, Dr. Francis Fluharty, 9/24/2026
- College of Engineering Assistant Dean, Dr. Mable Fok, 9/24/2026
- Interim Head of the Department of Biochemistry and Molecular Biology, Dr. David Garfinkel, 9/24/2026
- Warnell School of Forestry and Natural Resources Associate Dean, Dr. Rhett Jackson, 9/24/2026
- Director of the Graduate Certificate in Crisis, Risk, and Disaster Communication, Dr. Yan Jin, 9/24/2026
- Director of the Graduate Certificate in Organizational Coaching, Dr. Diann Jones, 9/24/2026
- Head of the Department of Cellular Biology, Dr. James Lauderdale, 9/24/2026
- Head of the Department of Microbiology, Dr. Zachary Lewis, 9/24/2026
- Head of the Department of Horticulture, Dr. Leonardo Lombardini, 9/24/2026
- Director of the Graduate Certificate in Nonprofit Management and Leadership, Dr. Anthony Mallon, 9/24/2026
- Head of the Department of Crop and Soil Science, Dr. Jodi Johnson Maynard, 9/24/2026

- Director of the Division of Biological Sciences, Dr. Kristen Miller, 9/24/2026
- Terry College of Business Associate Dean, Dr. Henry Munneke, 9/24/2026
- Mary Frances Early College of Education Associate Dean, Dr. Stacey Neuharth-Pritchett, 9/24/2026
- Director of the Institute for Plant Breeding, Genetics, and Genomics, Dr. Wayne Parrott, 9/24/2026
- Grady College of Journalism and Mass Communication Associate Dean, Dr. Jonathan Peters, 9/24/2026
- Terry College of Business Associate Dean, Dr. Mike Pfarrer, 9/24/2026
- Odum School of Ecology Associate Dean, Dr. Pejman Rohani, 9/24/2026
- Director of the Graduate Certificate in Complexity Leadership, Dr. Cynthia Sims, 9/24/2026
- Head of the Department of Communication Studies, Dr. Belinda Stillion Southard, 9/24/2026
- Director of the Master of Arts (M.A.) in Nonprofit Management and Leadership, Dr. Lori Tiller, 9/24/2026

Letter of Support:

- AGCO Global Deployment Lead for Farm Data and Connectivity, Matt Rushing, 10/6/2026
- Bayer Global Head of University Strategy and Outreach, Masha Trenhaile, 10/6/2026