

Routing for On-Campus Approval of the Letter of Intent for a New Degree Program

Proposed Program Title: Agricultural and Human Sciences
Degree Type (circle one): Bachelor's / Master's / Doctoral
Proposed Effective Date: August 15, 2020 Program Contact: Kim Allen (Kiallen@ncsu.edu), Sackie Bruce
Proposed CIP Code (see <https://nces.ed.gov/ipeds/cipcode/default.aspx?y=55>): 19.0101 ^{jabruce2@ncsu.edu}

Routing Action: Indicate date when the following occurs

Completed Letter of Intent and 1-page Concept Paper

Completed Letter of Intent

1/15/19 Department Head endorses*
1/17/19 College Curriculum Committee (undergraduate or graduate) recommends*
1/17/19 College Dean endorses*

Letter of Intent moves to Undergraduate or Graduate office for routing

1/28/19 Recommended by Vice Provost, DELTA, if applicable*
2/6/19 Associate Deans Council or Graduate Operations Council informed
3/7/19 Dean (Graduate School or DASA) approves*

Letter of Intent moves to the Executive Vice Chancellor Provost's office for routing

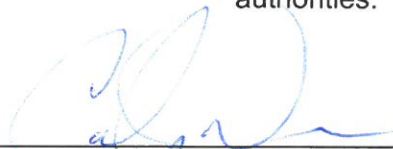
2/13/19 Substantive Change Review Team (SCRT) makes initial determination of likelihood of SACSCOC notification
12/13/18 IR Council of Deans recommends*
Vice Provosts informed
University Council informed
4/5/19 Executive Vice Chancellor and Provost approves*
4/23/19 Submitted to UNC System Office by Provost's Office

*Signature is required on the signature page for the action

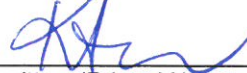
Agricultural and Human Sciences
North Carolina State University

This request has been reviewed and approved by the appropriate campus committees and authorities.


Endorsed By:

Carolyn Dean  1.15.19
Head, Department/Director of Graduate Program (Printed Name and Signature) Date

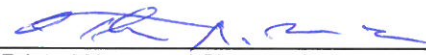
Recommended By:

Kimberly Allen  1/17/19
Chair, College Graduate Studies Committee (Printed Name and Signature) Date

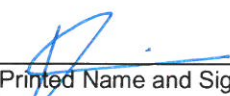
Endorsed By:

John M. Dede  1/17/19
College Dean (Printed Name and Signature) Date

Recommended By:

Thomas S. Miller III  1/28/19
Vice Provost, DELTA (if DE degree) (Printed Name and Signature) Date

Approved By:

Peter J. Harnies  3/7/19
Dean of the Graduate School (Printed Name and Signature) Date

Recommended By:

Shawn K. Jamel Deane K. Larek 12/13/18
Dean's Council (Printed Name and Signature) Date

Approved By:

Walter Hill Wesley Andrew 4/5/19
Executive Vice Chancellor and Provost (Printed Name and Signature) Date

Approved By:

N/A
Chancellor (Printed Name and Signature) Date



THE
UNIVERSITY OF
NORTH CAROLINA
SYSTEM

Letter of Intent to Develop New Academic Degree Program

The following approvals must be obtained prior to sending the Letter of Intent to Develop a New Academic Degree Program to the UNC System Office.

Institution _____ North Carolina State University _____

Degree Program Title (e.g. M.A. in Biology) _____ Ph.D. in Agricultural and Human Sciences _____

Reviewed and Approved By (Name and title only. No signature required in this section.)

Check box to indicate participation in review. (Provost is required.)

- Provost: Warwick Arden
- Faculty Senate Chair (as appropriate):
- Graduate Council (as appropriate): List of council members can be found at:
<https://grad.ncsu.edu/about/people/goc/>
- Undergraduate or Graduate Dean (as appropriate): Peter Harries
- Academic College Dean: John Dole
- Department Chair: Carolyn Dunn
- Program Director/Coordinator: Kim Allen and Jackie Bruce

New Academic Proposal Process

New academic programs are initiated and developed by the faculty members. Approval of the Letter of Intent to Develop a New Academic Degree Program must be obtained from department chairs and college deans or equivalent administrators before submission to the UNC System Office review.

Directions: Please provide a succinct, yet thorough response to each section. Obtain the Provost's signature and submit the proposal via the PREP system to the UNC System Vice President for Academic Programs, Faculty, and Research, for review and approval by the UNC System Office. Once the Letter of Intent to Develop is approved, the institution can begin work on the formal Request to Establish a New Degree Program.

Letter of Intent to Develop a New Academic Degree Program

| | |
|--|---|
| Institution | NC State University |
| Joint Degree Program (Yes or No)? If so, list partner campus. | No |
| Degree Program Title (e.g. M.A. in Biology) | PhD in Agricultural and Human Sciences |
| CIP Code and CIP Title (May be found at National Center for Education Statistics) | 19.0101 Family and Consumer Science/ Human Sciences |
| Require UNC Teacher Licensure Specialty Area Code (Yes or No). If yes, list suggested UNC Specialty Area Code(s). | No |
| Proposed Delivery Mode (campus, online, or site-based distance education). Add maximum % online, if applicable. | The degree will be offered both on campus and online with 60% on campus and 40% online, using both synchronous and asynchronous course instruction. |
| Proposed Term to Enroll First Students (e.g. Spring 2019) | Fall, 2020 |
| List other programs in the UNC System (may be found at UNC System website) | There are no other PhD programs that combine Family and Agricultural Sciences |

SACSCOC Liaison Statement: *(Provide a brief statement from the University SACSCOC liaison regarding whether the new program is or is not a substantive change.)*

The Substantive Change Review Team (SCRT) reviewed this proposal on 12/13/2018 and determined it was not a substantive change for NC State.

Program Summary: *(Briefly describe the proposed program and summarize the overall rationale.)*
Maximum of 1,000 words.

Include the following in your narrative:

- Ways in which the proposed program is distinct from others already offered in the UNC System (use the 4-digit CIP as a guide). Information on other programs may be found on the UNC System [website](#).
- How this program supports specific university and UNC System [missions](#).
- Collaborative opportunities with other UNC institutions as appropriate.

Rationale: North Carolina is one of the top 10 states in the nation in agricultural production, as well as one of the most populous states in the country. There is a growing interest in the intersection of agriculture, family well-being, and community. Establishing a doctoral degree in Agricultural and Human Sciences will address the emerging need for expertise in translating research in those intersections for use in applied settings. The PhD in Agricultural and Human Sciences would include two inter-related tracks:

- Youth, Family, and Community Sciences (YFCS)
- Agricultural & Extension Education (AEE)

The PhD program will build on existing collaboration between two departments that recently merged to create the Department of Agricultural and Human Sciences. The joint PhD program will draw from the many disciplines represented in the department, addressing the human dimensions of agriculture as a common core of study. Graduates of the Youth, Family, and Community Sciences track will research, design, and lead initiatives, organizations, and program for youth and families. The program will draw from CIP codes in parenting (34.0102), Family and Consumer Sciences (19.0707), Human Development and Family Studies, (19.0701), Community Health (51.2208), and Youth Services/Administration (44.0702). While there are PhD programs in family sciences within the UNC system, there are no programs that emphasize agricultural and extension education. Likewise, there are no AEE programs with an emphasis on family sciences. Graduates of the Agriculture and Extension Education track will teach, lead and serve in higher education, government and industry and will draw from Agriculture and Extension Education code (01.0801).

Degree Description and Collaboration:

The PhD program in Agricultural and Human Sciences will train the next generation of professionals in agriculture and human sciences to find solutions to grand challenges and extend knowledge to create healthy communities for youth and families. The program will provide students with advanced skills in translational research to help improve the health and well-being of youth, families and communities, both locally and globally. The program will build on existing partnerships within the University of NC system including UNC Chapel Hill, and ECU and with the NC Agromedicine Institute, a partner program of East Carolina University, NC A&T State University, and NC State University.

The establishment of this PhD Program would address the following objectives:

- Provide NC State University with a PhD in Agricultural and Human Sciences that emphasizes collaboration among the field's key disciplines;
- Fulfill NC State's strategic focus areas in "health & well-being" and "educational innovation" by creating a new joint PhD program that focuses on the human dimensions of agriculture;
- Support NC State University's Strategic Goal 1 (success of our students through educational innovation) and Goal 3 ("enhance interdisciplinary scholarship to address the grand challenges of society");
- Advance the broader UNC system directives Goal 1: ("increase access to success"), Goal 3: ("all useful learning"), and Goal 8: (Research Productivity);
- Address a pressing need for a doctoral program that focuses on the applied science of the human dimensions of agriculture;
- Contribute to economic growth in North Carolina and beyond.

Student Demand: *(Provide evidence of student demand. Discuss the extent to which students will be drawn from a pool of students not previously served by the institution. Maximum length 1,000*

words.)

In March 2018, the AHS Department surveyed a sample of current undergraduate and graduate students, and alumni from the College of Agriculture and Life Sciences (pre- and post-departmental mergers) regarding interest in this proposed program, preferred course delivery strategy (in-person, distance education, or a hybrid of both), and potential career path.

Sixty-four individuals responded to the online survey. The first question of the survey asked how likely they would apply for a PhD in Agricultural and Human Sciences. Only 4 individuals selected that they would be extremely unlikely to apply for all three types of PhD programs.

Among all respondents, on average, 26% were extremely likely to apply for one of the three program options types: 100% in-person; 100% distance education, or a hybrid of in-person and distance education. Nearly 70% of respondents were either somewhat likely or extremely likely to apply for the 100% in-person program; 56% to the distance education program, and 63% to the hybrid program.

When asked what tracks in which respondents had interest in majoring, 36% were interested in majoring in Youth, Family, and Community Sciences; 70% of respondents were interested in majoring in Agricultural Education and Extension, and 17% selected "other". Additionally, when asked about potential post graduate career paths, 33% selected higher education; 25% government, 20% non-profit organization, 17% for-profit industry, 4% trade groups, and 1% selected "other". The Department anticipates that each track would enroll approximately 20 students, which would place this PhD program on par with others in the College with enrollment in the upper teens and low 20s.

Respondent demographics include, 68% were female and 22% were male; 76% were White/Non-Hispanic, 8% African American, 8% Asian, and 7% multi-racial; 47% graduated between 2010-2017 and 53% are current students. Respondents represented various degree programs, including: Animal Science (21%); Agricultural Education and Extension (18%); Food Science, Bioprocessing, and Nutrition Science (18%); Youth, Family and Community Sciences (12%); Biological and Agricultural Engineering (7%); Poultry Science (5%); Agricultural and Resource Economics (3%); Biochemistry (3%); Horticulture (3%); Soil Science (3%); and 3% "other".

The DGPs of the AEE and YFCS programs regularly receive a large number of inquiries from current and past students, and from prospective students, on the likelihood of a PhD program. While AEE currently has an EdD program, it would be discontinued in lieu of the PhD program. Historically, when the original AEE department was housed in the College of Education, an EdD was the appropriate approach to a terminal degree. However upon the move to the College of Agriculture and Life Sciences, the approach of the faculty was to treat the EdD program as though it was a traditional PhD. As the field of agricultural education continues to expand beyond traditional teacher preparation education into communication, international development, extension and leadership, the demand from those seeking a terminal degree continues to trend toward programs offering a PhD and away from EdD programs which are often seen as less rigorous and less likely to lead to an academic or policy position. With the addition of the PhD program, we will be able to draw from a pool of students not previously served by NCSU but that will now see an opportunity to study for the highly desired PhD.

Likewise, students from the YFCS program express regular interest in pursuing their doctoral degree. Most students that complete the YFCS program do not attend a doctoral program at all and if they do, they complete their doctoral programs elsewhere with a focus on family science or human development. The creation of this new program will greatly increase the number of students not currently served by the NCSU.

Societal Demand: *(Provide evidence of societal demand and employability of graduates from each of the following source types. Maximum length 1,000 words)*

North Carolina is a top agricultural production state, and there is a growing interest in the intersections of agriculture and health. In 2016, AHS faculty helped create the NC Food and Health Care Intersections group. This group seeks to better integrate medical care and improve local food access through production, distribution, and education with existing NC sustainable farming and food program initiatives in order to achieve healthy outcomes for children and persons with chronic disease. It includes members from the Center for Environmental Farming Systems, UNC Department of Family Medicine, East Carolina University Brody School of Medicine, UNC Gillings School of Global Public Health, NC Division of Public Health, Blue Cross and Blue Shield of North Carolina Foundation, United Healthcare, Environmental Defense Fund, NC State Employees Health Plan, and Farmer Foodshare. These groups exemplify the broad and multi-sector career paths that could be available to students in a PhD program in Agricultural and Human Sciences, who could provide expertise on the human dimension of agriculture in fields as diverse as public health, agriculture, education, sociology, extension, and medicine.

According to recent reports ([Link here](#)), about half of doctoral students in 2014 reported that their future positions would be in the academy. Given the strong practical focus of this program, students with a PhD in Agricultural and Human Sciences would be suited for academic positions in either Agriculture and Extension Education (AEE) or family sciences/human development (YFCS).

Nationally there is a shortage of professionals with doctorates in Agricultural and Extension Education. There are about 12 programs (out of 93 nationwide) with Doctoral degrees in agricultural education. NCSU is 4th in enrollment among these institutions and the sole doctoral granting institution for Agricultural and Extension Education in the state. In North Carolina there is a need for administrators and specialists who hold doctoral degrees within the Cooperative Extension Service.

Family Sciences graduates are also needed. A 2017 report from the Family and Consumer Sciences Research Journal ([Link](#)) speaks to the shortage of FCS professionals with bachelors through the doctoral degrees. The National Council for Family Relations states that there are a variety of employment opportunities available to family science graduates. A 2016 Burning Glass report created for the YFCS program ([link](#)) shows that there were over 35,000 job postings in the past twelve months in the fields of Human Development, Family and Consumer Sciences, and Child Development. Data specific to doctoral level positions shows a national upward trend of job expectancy at a rate of 10.75% and a state upward trend of 14.21%, higher than the national and state averages for other professions. Additionally, master's level students that are graduating from the YFCS program and securing employment regularly express a desire to continue their education and move into leadership roles within the field. Leadership roles requiring a doctoral level degree in family science include academia, program directors of large family and youth-centered non-profits, health care, evaluation specialists, and researchers.

Further, with NCSU's commitment to diversity, growing the current AHS academic programs can help to meet the goal of recruiting and training diverse students. The current student make-up of master's level YFCS students consists of 35% black, 10% from a blend of races, 4% Asian, 1% Native, 45% white, and 5% of our students didn't specify race. The YFCS program is also diverse in terms of gender, with 82% of our students reporting female. This puts the YFCS program as one of, if not the most diverse program in the College of Agricultural and Life Sciences.

Given that this program incorporates theory and educational practice, graduates would also be well-prepared for positions outside of the academy, in positions including: advisory/director positions within the

government (ex: USDA, DHHS), extension administrative positions, non-profit executive director positions, and research positions at non-profit or for-profit research firms (ex: RTI).

For Doctoral Programs Only:

Describe the following (maximum length 2,000 words):

- The research and scholarly infrastructure in place (including faculty) to support the proposed program.
- Method of financing the proposed new program (including extramural research funding and other sources) and indicate the extent to which additional state funding may be required.
- State the number, amount, and source of proposed graduate student stipends and related tuition benefits that will be required to initiate the program.

Infrastructure:

The Agricultural and Human Sciences Department has the research and scholarly infrastructure to support a newly formed PhD program. The department consists of twenty-two tenure track faculty, twenty-eight grant funded professionals, four extension funded professionals, eleven Expanded Food and Nutrition Education Program (EFNEP) funded professionals, seven Future Farmers of America (FFA) professionals and five administrative professionals for a total of seventy-seven full time departmental members. Faculty have expertise in multi-disciplinary fields including family science, financial management, local food systems, leadership, food safety, nutrition, volunteer resource management, agricultural education, evaluation, housing, energy management, disaster preparedness, community-based health, chronic disease prevention, food insecurity, occupational safety and health, positive youth development, and extension education. AHS faculty are in a unique position to bring together agriculture, family well-being, and community sectors in a training program that promotes health and well-being.

The AHS department consists of two academic programs, Agricultural and Extension Education and Youth, Family, and Community Science. The two programs currently serve students seeking degrees in agricultural education, agricultural sciences, extension education, and youth, family, and community sciences. These academic programs currently include 212 undergraduate and 101 graduate students including 17 doctoral students pursuing an EdD in AEE. While the department currently has the capacity to serve all students, the program is expected to grow with the offering of a PhD that will replace the EdD in AEE and offer tracks in both AEE and YFCS. The current AEE EdD program will be discontinued and students currently enrolled in the existing EdD will be allowed to complete their current plan of study or complete the new requirements and switch to the PhD.

Financing:

The doctoral program is expected to grow to 30 doctoral students within 5 years. The program will be managed jointly by the two Directors of Graduate Programs with support from graduate program coordinators. These positions are already funded and no additional funds are requested. Students from both tracks will take a core set of programming to include six existing courses currently offered through AEE and university partners: Research Methods, Research Design, Qualitative Methods, and two statistics courses, as well as a new core course to be developed, Foundations in AHS. In addition to the joint core courses, there

will be two tracks specific to AEE and YFCS. The AEE courses will be composed of existing doctoral courses and the addition of several research methods courses including courses in advanced qualitative and quantitative methodologies. The current YFCS program is currently all master's level thus faculty will create and teach both online and face to face doctoral courses such as Family Life in a Global Community, Culture and Health Transformation in Youth and Family Settings, Resiliency and Health, and Advanced Human Development to include courses on child development, adolescence, and life-span development.

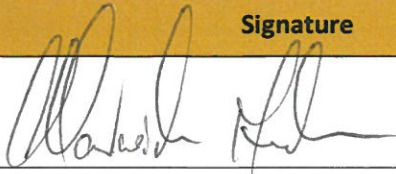
Faculty in the Department of Agricultural and Human Sciences have a long history of successful resource development. They receive grants and contracts from a variety of sources including state government, federal government, and private foundations. They serve as Principal Investigators and collaborators for grants outside the department. In addition, our entrepreneurial faculty fund programmatic work through sales and service accounts. Funding from grants and contracts supports teaching, research and extension efforts in the department as well as over 25 professionals. AHS faculty secured over seven million dollars in 2017 as PIs, and over 15 million as collaborators on grant projects. The total multi-year commitments of AHS faculty total over \$34 million in 2017. Faculty hire students to work on projects, often funding graduate students from outside our department due to the need for agricultural and human sciences content that is not always available in our current two graduate programs. Faculty can support future students through their grants and contracts.

Contact:

| Position Title | Name | E-mail Address | Telephone |
|-------------------------------------|----------------|--|--------------|
| Director of Graduate Programs, YFCS | Kimberly Allen | kiallen@ncsu.edu | 919-515-9139 |
| Director of Graduate Programs, AEE | Jackie Bruce | jabruce2@ncsu.edu | 919-515-8801 |

*A committee of 7 AHS faculty collaborated on the creation of this document.

This Letter of Intent to Plan a New Program has been reviewed and approved by the appropriate campus authorities.

| Position Title | Signature | Date |
|--------------------------------|---|---------|
| Provost |  | 9/5/19. |
| Provost (Joint Partner Campus) | | |