UNIVERSITY OF GEORGIA

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University Council

January 18, 2019

UNIVERSITY CURRICULUM COMMITTEE – 2018-2019
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Dear Colleagues:

The attached proposal from the Franklin College of Arts and Sciences for a new Graduate Certificate in Science and Health Communication will be an agenda item for the January 25, 2019, Full University Curriculum Committee meeting.

Sincerely,

John Maerz, Chair
University Curriculum Committee

cc: Interim Provost Libby V. Morris
Dr. Rahul Shrivastav

OUTLINE FOR AN
INTERDISCIPLINARY CERTIFICATE PROGRAM

I. Basic Information

1. **Institution:** University of Georgia **Date:** April 23, 2018
2. **School/College:** Franklin College of Arts and Sciences
3. **Department/Division:** Communication Studies
4. **Certificate Title:** Science and Health Communication
5. **Level (undergraduate or graduate):** Graduate
6. **Proposed starting date for program:** Fall 2019

Abstract of the program for the University Council's agenda:
As President Morehead noted in his 2017 State of the University address, there are a number of "grand challenges" facing the state, the nation, and the world that require innovation within, and interdisciplinary partnerships among, engineering, public health, and the natural and social sciences. For these fields to fulfill their promise, effective communication will be crucial, not only to ensure successful integrative research but to garner and maintain public support. While UGA is poised to build on and expand its research mission, it does not yet have a curriculum in place to foster effective communication skills for scientists and their advocates, unlike several of its peer and aspirational institutions. To that end, we are proposing a new Graduate Certificate in Science and Health Communication.

Several peer and aspirational institutions have such programs, including George Mason University, University of Kentucky, University of Wisconsin, and University of Utah. Here at UGA, there is growing interest in science communication, evidenced by departmental course offerings in Plant Biology and the Graduate School. The course offered by Meredith Welch-Devine, for example, has increased its enrollment from 8 to 17 students over the last two years. The College of Veterinary Medicine has a Non-Thesis Master of Comparative Biological Sciences, which recognizes the importance of effective communication skills.

The certificate program we are proposing will build on this growing interest by implementing a comprehensive curriculum grounded in the field of Communication Studies. The strength of such an approach is two-fold: 1) it will enable students to claim expertise in science and health communication, expertise that can both enhance the research process and expand job opportunities for students in the sciences, social sciences, and humanities; 2) it will provide students with an in-depth foundation in communication along with practical experience in communicating in public and technical spheres. For example, the core course "Science Communication" (COMM 6350) not only teaches students how to speak effectively to expert audiences (drawing on the field's expertise in audience analysis, analogy, framing, consensus-building, visual imagery, emotional appeals, controversy, and narrative, and how those rhetorical devices are operative in technical discourse), it draws upon the field's expertise in the relationship between messaging and technology, intercultural communication, and discipline-specific norms of reasoning and decision-making to teach students how to communicate effectively in interdisciplinary and multinational technical teams. Communication Studies is also uniquely suited to incorporate consideration of values, ethics, and public understanding of science so that students will understand the character, forces, and dynamics involved in popular

representations of science, thereby enabling judgments with regard to the relationship between science and society. For instance, research shows that science and health communication is effective with lay audiences when scientists move beyond the "deficit-model," which holds that the public's lack of science and health education and/or understanding of particular research programs and outreach is the basis for skepticism and outright opposition or refusal to change behavior. Although the education of publics is an important part of outreach and advocacy, engagement is further served by a broader vision of science and society, one informed by more deliberative models of public engagement.

7. **Submit letters of support from the various academic unit heads involved in developing the program initiative or whose support is vital to its success.**

PBIO support e-mail available upon request.

II. Response to the Criteria for All Programs

The criteria that proposed new programs are expected to meet in order to be approved and implemented within the University of Georgia are listed below. Please provide sufficient explanation as to how the proposed program satisfies each criterion.

1. ***The purpose and educational objectives of the program must be clearly stated, and must be consistent with the role, scope, and long-range development plan of the institution*.**

   A. **State the purpose and educational objectives of the program and explain how the program complements the role, scope, and long-range development plan of the institution.**

   The purpose of the proposed Certificate in Science and Health Communication is to train students in science and health-related disciplines to communicate effectively with various audiences for the purposes of 1) creating and maintaining disciplinary and interdisciplinary alliances within the sciences, including public health and epidemiology; 2) successfully communicating with the public and its various stakeholders; and 3) training for a diverse number of jobs, including public policy advocacy, public health consulting, and lab management.
   Students will be trained to 1) communicate about science and health in a clear, compelling, and persuasive way; 2) effectively employ the use of visual aids to both specialized and lay audiences; 3) identify, evaluate, and respond to different types of audiences; 4) successfully evaluate and navigate controversies around scientific research products, especially around issues of risk.

   This certificate will serve the University's "Grand Challenges" initiative insofar as the success of science, engineering, medicine, and public health research to meet economic, health, and security needs will rely significantly on successful communication to cultivate innovative research across disciplinary lines and ensure public support.

B. Describe the interdisciplinary nature of the proposed program. Which school(s) or college(s) and department(s) will be involved in the development of the program? Describe the expected stage of development for this program within five years.

Science and health communication is an inherently interdisciplinary field of study and practice, which promotes interdisciplinary activity. An expert in science and health communication will understand the fundamental assumptions that inform a wide range of language fields. For example, an expert in science communication will be able to understand the differences between public understanding of acceptable risk and technical definitions of acceptable risk. Moreover, core certificate classes will be taught by faculty in the Communication Studies department who have training in multiple methodologies, including rhetorical and social scientific (both qualitative and quantitative social science research). In addition, the certificate offers students the opportunity to work with faculty from the sciences and health-related disciplines. For example, students can come to the certificate program through elective offerings in the life sciences (PBIO 6920W) that meet the certificate's writing requirement.

2. *There must be a demonstrated and well-documented need for the program.*

A. Explain why this program is necessary.

Universities are recognizing the importance of effective communication among scientists, especially in the context of scarce financial resources to support scientific research, the emergence of risks and crises that at times result in public mistrust of experts, and the need for interdisciplinary research to solve the world's problems. Professional societies are increasingly recognizing the importance of communication. For example, in a document titled "Unleashing a Decade of Innovation in Plant Science," the authors recognize the importance of effective science communication, the implicit assumption being that inadequate funding levels are just one unfortunate consequence of the failure of the scientific community to communicate the significant economic and environmental need for innovative plant science.

There is currently no certificate in science or health communication at the University of Georgia. Although some courses are offered in various departments, students do not have the opportunity to engage in systematic training in science and health communication. Moreover, the certificate will integrate theory and practice based on the key principles of Communication Studies, which includes effective presentation style, audience analysis, ethical communication, and deliberative models of engagement.

B. In addition, provide the following information:

1. **Semester/Year of Program Initiation:** The program can begin as early as Fall 2019. All but one of the courses are listed in the UGA Bulletin.
2. **Semester/year full implementation of program:** Fall 2019
3. **Semester/year first certificates will be awarded:** Fall 2019
4. **Annual number of graduates expected (once the program is established):** 6
5. **Projected future trends for number of students enrolled in the program:** 6-10

3. *There must be substantial evidence that student demand for the program will be sufficient to sustain reasonable enrollments in the program*.

A. Provide documentation of the student interest in the program, and define what a reasonable level of enrollment is for a program of this type. Provide evidence that student demand will be sufficient to sustain reasonable enrollments.

Currently, graduate students regularly enroll in science and health communication courses offered in the Department of Plant Biology and Communication Studies. Dr. Meredith Welch-Devine, Director of Interdisciplinary Programs, regularly teaches a 1-hour credit course in science communication.

The certificate will also prove attractive to graduate students in the Department of Communication Studies. During exit interviews students have expressed an interest in such a certificate, especially as they increasingly contemplate careers in professional communication.

B. In addition, provide the following information:

To what extent will minority student enrollments be greater than, less than, or equivalent to the proportion of minority students in the total student body?

It is expected that minority student enrollment will be greater than or equivalent to the proportion of minority students in the total student body.

4. *The design and curriculum of the program must be consistent with appropriate disciplinary standards and accepted practice.*

Provide the following information:

A. Present a detailed curriculum outline of the program listing specific course requirements (to include programs of study, course prefix, number, and title).

Students completing the certificate shall have earned a grade of C or better in each of the required courses. At least 12 credit hours are required to earn the certificate, as described below:

I. Two foundational communication courses (6 credit hours; no prerequisites required):

COMM 6350 or COMM 6350E, Science Communication (3 hours)
COMM(HPBR) 6610, Health Communication (3 hours)

II. Electives (2 required, one must be writing focused).

Elective options within the Department of Communication Studies:
*COMM 6110, Speech Composition (3 hours)
COMM 6310 or COMM 6310E, Communication Strategies in Government (3 hours)
COMM 6360, Communication Strategies in Social Movements (3 hours)
COMM 8550, Advanced Topics in Interpersonal Communication (3 hours)
COMM(JRMC) 7612, Medical Interviewing and Information Dissemination (3 hours)
COMM 8165 Public Health Communication (3 hours)
COMM 8350, The Rhetoric of Science (3 hours)
COMM 8520, Seminar In Communication and Social Influence (3 hours)

Electives outside of Communication Studies can include:
*PBIO 6920W, Explaining Your Science (3 hours)
EETH(JURI) 7870, Environmental Dispute Resolution (2 hours)
JRMC 8170, Risk Communication (3 hours)
HPRB 7370, Social Marketing of Health: Theory and Process (3 hours)
HPRB 7310, Foundations of Public Health Communication (3 hours)

*These courses satisfy the writing requirement.
Note: Other courses may satisfy the requirement with approval of the director.

III. **Identify which aspects of the proposed curriculum already exist and which constitute new courses.**
COMM 6110 (Speech Composition) is the only new course added for the certificate. It received all institutional approvals in the spring 2018 semester.

IV. **Identify 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.**
This Certificate proposal is most similar to the one offered at George Mason University (GMU): https://communication.gmu.edu/programs/LA-CERG-

PWE-SCMN

The GMU Certificate requires 15 credit hours, including 2 required courses ("Science Communication" and "Advanced Communication Skills for STEM"). Gary Kreps, who prior to moving to GMU was the founding chief of the Health Communication and Informatics Research Branch at the National Cancer Institute, established the GMU program.

Our proposed certificate will be different from GMU and other similar certificates in at least 3 ways: 1) it is structured to allow students to engage in rigorous study while not being unduly burdened with requirements; 2) we focus on science *and* health communication; and 3) our core courses integrate theory and praxis in order to promote professional communication that is grounded in communication theory research.

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

N/A

5. ***Faculty resources must be adequate to support an effective program.***

A. Define the size, experience, and specializations of the full-time faculty needed to support an effective program. Identify the extent to which such faculty resources currently exist at the institution, and what additions to the faculty will be needed to fully implement the program. Specify how many full-time faculty will provide direct instructional support to this program.

The Department of Communication Studies includes eight full-time, tenured and tenure-track faculty with expertise in science and/or health communication. We have recently hired an additional health communication scholar with a specialization in health disparities. Seven of our current faculty members have committed to teaching the core required courses and the COMM electives on a regular basis. We anticipate offering the required courses every year (one in the fall, one in the spring).

No significant change in assignments will be necessary to run the certificate program. All faculty listed have significant research and teaching experience in science communication and health communication.

B. In addition, for each faculty member directly involved in this program, list:

1) Name, rank, degrees, academic specialty, educational background

2) **Special qualifications related to this program**
3) **Relevant professional and scholarly activity for past five years**
4) **Projected responsibility in this program and required adjustments in current assignments**

- Celeste Condit, Professor. Rhetoric of science, science communication, and science studies. PhD, University of Iowa
  Profile link: http://comm.uga.edu/directory/people/celeste-condit
- Thomas Lessl, Professor. Rhetoric of science and science writing. PhD, University of Wisconsin
  Profile link: http://comm.uga.edu/directory/people/thomas-lessl
- Kelly Happe, Associate Professor. Rhetoric of science, science studies, and science communication. PhD, University of Pittsburg
  Profile link: http://comm.uga.edu/directory/people/kelly-happe
- Jennifer Monahan, Professor. Health communication. PhD, University of Southern California
  Profile link: http://comm.uga.edu/directory/people/jennifer-monahan
- Jiyeon So, Assistant Professor. Health communication. PhD, University of California, Santa Barbara
  Profile link: http://comm.uga.edu/directory/people/jiyeon-so
- Analisa Arroyo, Assistant Professor. Health communication. PhD, University of Arizona
  Profile link: http://comm.uga.edu/directory/people/analisa-arroyo
- Jiaying Liu, Assistant Professor. Health communication. PhD, University of Pennsylvania
  Profile link: http://comm.uga.edu/directory/people/jiaying-liu
- Soroya McFalane, Assistant Professor, Health Communication, PhD, University of Miami

C. Where it is deemed necessary to add faculty in order to fully develop the program give the desired qualifications of the persons to be added.

No additional faculty will be required to run this certificate program.

6. *Library, computer, and other instructional resources must be sufficient to adequately support the program.*

A. Describe the available library resources for this program and the degree to which they are adequate to support an effective program. Identify the ways and the extent to which library resources need to be improved to adequately support this program.

Library resources are currently sufficient.

B. Likewise, document the extent to which there is sufficient computer equipment, instructional equipment, laboratory equipment, research

support resources, etc. available to adequately support this program. Specify improvements needed in these support areas.

Instructional equipment is currently sufficient.

7. ***Physical facilities necessary to fully implement the program must be available.***

Describe the building, classroom, laboratory, and office space that will be available for this program and evaluate their adequacy to fully support an effective program. Plans for allocating, remodeling, or acquiring additional space to support the program's full implementation of the program should also be identified.

No additional space is required beyond current facilities.

8. ***The expense to the institution (including personnel, operating, equipment, facilities, library, etc.) required to fully implement the program must be identified.***

   A. **Detailed funding to initiate the program and subsequent annual additions required to fully implement the program are needed below. Estimates should be based upon funding needed to develop an effective and successful program and not upon the minimal investment required to mount and sustain a potentially marginal program.**

      No additional funding is needed. Existing courses and instructors are adequate to serve the expected number of students.

   B. **Indicate the extent of student support (fellowships, assistantships, scholarships, etc.) available for this program, and evaluate the adequacy of this support. Assistantships funded from institutional (as opposed to sponsored) funds should be included in this funding analysis as well.**

      N/A

9. ***Commitments of financial support needed to initiate and fully develop the program must be secured.***

   A. **Identify the sources of additional funds needed to support the program and the probability of their availability.**

      The Department of Communication Studies will dedicate the necessary resources to enact and maintain the new certificate.

   B. **It is particularly important to include in this response the long-range plans for additional or expanded facilities necessary to support an effective program. Evaluate the timing and likelihood of such capital funding.**

Should the program grow beyond what we anticipate, additional instructors and/or staff may be needed.

10. ***Provisions must be made for appropriate administration of the program within the institution and for the admission to and retention of students in the program in keeping with accepted practice.***

    Describe and evaluate the structure for the administration of the program. Explain the degree to which that structure is in keeping with good practice and accepted standards. Similarly, explain how and by what criteria students will be admitted to and retained in the program, and how these procedures are consistent with accepted standards for effective and successful program.

    The program will be administered by the Associate Department Head of Communication Studies who will be responsible for overseeing 1) applications to the certificate program; 2) advising; and 3) clearing students for registration. The Associate Head will also track the number of the students in the certificate program for the purposes of annual assessment. The Graduate Coordinator will include certificate data in yearly assessment reports (including data gleaned by exit surveys). The Associate Head will review requests to opt out of the writing requirement.

Approvals on File

Proposal: Graduate Certificate in Science and Health Communication

College: Franklin College of Arts and Sciences

Department: Communication Studies

Proposed Effective Term: Fall 2019

School/College:

- Department of Plant Biology Department Head, Dr. Lisa Donovan, 1/15/2019
- Department of Communication Studies Department Head, Dr. Edward Panetta, 4/23/2018
- Franklin College of Arts and Sciences Associate Dean, Dr. Jean Martin-Williams, 8/24/2018

Graduate School:

- Graduate School Dean, Dr. Suzanne Barbour, 11/14/2018