DATE: October 10, 2016

TO: Graduate Curriculum Committee

FROM: Krista Hoffmann-Longtin, PhD, Assistant Professor, Communication Studies
Melvin Wininger, PhD, Senior Lecturer, English
Jason Organ, PhD, Assistant Professor, Anatomy and Cell Biology

RE: Graduate Minor in Communicating Science

Dear Graduate Curriculum Committee Members,

Please accept the attached proposal for a graduate minor in Communicating Science.

Designed with support from our institutional affiliation with the Alan Alda Center for Communicating Science at Stonybrook University, this minor seeks to address two key educational gaps for graduate students in our science and health disciplines.

First, scientists today need to connect to and to engage with the lay public, policy makers, funders, students, and professionals from other disciplines. Therefore, they increasingly need to tailor their communication for a variety of audiences who are not (or not yet) scientific experts or researchers.

Second, instead of assuming traditional PI roles and post-docs, PhDs are turning frequently to careers in business and industry, public policy, science reporting, and other fields. These emerging roles require the ability to communicate specific scientific knowledge to broad audiences (Funk & Rainie, 2015).

The proposed minor will prepare students for these complex communication expectations. The core courses provide rich experiential opportunities designed for students to learn the principles of developing audience-centered communication, distilling scientific concepts into meaningful narratives, and connecting effectively with collaborators and funders both in and outside their disciplines. These courses bring together communication theory, rhetorical theory, and the techniques of applied improvisation.

Course concepts will be presented in the context of the current scientific environment, discussing how messages can be tailored to engage students, encourage sound public decision-making, and improve patient care. In addition, the courses will address how effective communication can enhance scientists' career prospects, helping them secure funding, participate in research teams, and serve as effective teachers.

Our proposed minor has received support from Randy Brutkiewicz, PhD, Associate Dean for the Graduate Division, IU School of Medicine, Tom Davis, PhD, Dean of the IU School of Liberal Arts at IUPUI, and Simon Rhodes, PhD, Dean of the Purdue School of Science at IUPUI.

Thank you for your consideration of the minor, and please don't hesitate to contact us with questions.

IUPUI Graduate Office Form for Creation of a Graduate Minor

Date: 10-30-2016

Institution: Indiana University

School: IU School of Liberal Arts

Department: Communication Studies

Location: On Campus

Is 50% or more online?

Yes ☐ No ☒

Official Name of Minor: (required)	**Projected Semester and year of implementation*:**
Communicating Science	Fall 2017

*This does not guarantee the minor will be approved by the semester requested. It must still go through the appropriate approval process

Academic Career: (required)

GRD1 (limited to specific programs)

Please explain limitations to this minor, if any: Not open to Health Communication PhD students or Applied Communication MA students

Brief Description: (required)

The minor in communicating science is designed for masters and doctoral students in the sciences and health professions to develop audience-centered communication, distill scientific concepts into meaningful narratives, and connect effectively with collaborators and funders. The program brings together communication and rhetorical theory with the techniques of applied improvisation to enhance students' career prospects, help them secure funding, and serve as effective teachers.

Rationale for new minor: (required)

This graduate minor in communicating science addresses two primary problems:

Problem 1. Physicians and scientists today need to connect to and to engage with the lay public, policy makers, funders, students, and professionals from other disciplines. Therefore, they increasingly need to tailor their communication for a variety of audiences who are not (or not yet) scientific experts or researchers.

Problem 2. Instead of assuming traditional PI roles and post-docs, PhDs are turning frequently to careers in business and industry, public policy, science reporting, and other fields. These emerging roles require the

ability to communicate specific scientific knowledge to broad audiences (Funk & Rainie, 2015).

In both cases, current graduate programs in the sciences provide limited preparation for these communication expectations. As a result, this minor seeks to fill that educational gap for future scientists and physicians.

List of required courses: (required)	**List of electives** (6 credits required):
Students are required to take two semesters of 3, one-credit hour courses: <u>Co-Requisite Block 1 (3 cr hrs):</u> COMM-C 533 Distilling Your Message (1 credit) COMM-C 534 Improvisation for Scientists (1 credit) ENGL-W 533 Science Writing for Public Readers (1 credit) <u>Co-Requisite Block 2 (3 cr hrs):</u> COMM-C 535 Using Electronic Media (1 credit) ENGL-W 535 Advanced Science Writing for Public Readers (1 credit) COMM-C 536 Connecting with the Community (1 credit, Program Capstone)	Students will chose two courses (6 credit hours) from the following list: COMM-C 510 Health Provider-Consumer Communication (3 cr.) COMM-C 521 Family Communication in Health Contexts (3 cr.) COMM-C 591 Topics in Applied Communication (3 cr.) with relevant topics in science/health COMM-C 592 Advanced Health Communication (3 cr.) COMM-C 650 Health Communication in Mediated Contexts (3 cr.) COMM-C 695 Seminar in Communication and Healthcare (3 cr.) ENG-W 600 Topics in Rhetoric and Composition (3 cr.), with relevant topics in science/health GRAD-G 655 Research Communications Seminar (3 cr.) HIST-546 History of Science, Medicine, and Technology JOUR-J 528 Public Relations Management (3 cr.) JOUR-J 560 Public Relations Research and Evaluation (3 cr.), with topics in Public Relations in the Life Sciences and Integrating Marketing Communication in Health Care PBHL-H 612 Marketing for Health Services Delivery (3 cr.) PBHL-S 625 Applied Public Health Campaigns and Social Marketing Strategies (3 cr.) PBHL-S 622 Coaching for Health Behavior Change (3 cr.) PBHL-E 606 Grant Writing: From Befuddlement to Brilliance (3 cr.)

Contact Information

Contact person for this minor: (required)

Krista Hoffmann-Longtin	
Contact person's email: (required)	**Contact person's phone number: (optional)**
klongtin@iu.edu	317 278 2840
Student advisor (if different than above):	
Student advisor's email:	**Student advisor's phone number: (optional)**

Comments:
The minor will consist of 8 courses, total of 12 credits (6 required 1 credit courses and 2, 3 credit electives selected in consultation with a graduate faculty advisor.

New Course Requests have been submitted for the 6, 1 credit courses that are required for the minor.

Students completing the minor will be able to:

1. Define the importance of clear oral and written communication and recognize how to create clear meanings with varied audiences.

2. Attend to the needs of an audience, read verbal and nonverbal cues, and adjust communication in the moment, as needed.

3. Reduce self-consciousness in oral and written communication.

4. Use storytelling techniques effectively to evoke emotion and make personal connections through clear, vivid language.