2020 CALL FOR PROPOSALS: COURSE DEVELOPMENT GRANTS FOR INTERDISCIPLINARY CO-TEACHING IN SCIENCE AND SOCIETY

ELIGIBILITY: All lecturers and tenured or tenure-track faculty at Columbia University (including Barnard College and Teachers College)

AMOUNT OF AWARD: \$3,000 with the possibility of additional/follow-on funding for implementation or in-class support.

TO APPLY: Please submit all proposals through the <u>online form</u>. See page 3 for instructions and a copy of the form's requirements.

DEADLINE: Rolling, through the 2020-21 academic year

The Columbia University Center for Science and Society invites proposals for the development of crossdisciplinary, co-taught courses in "science and society" for undergraduates and graduate students. Courses must be led by at least two co-instructors, one from the natural sciences or other STEM-related field, and the other from the arts, humanities, law, social sciences, or other non-STEM field. The Center for Science and Society will provide an initial grant of \$3,000 to support the development of the course, with potential opportunities for follow-on funding during the teaching phase. The Center will also assist awardees in navigating the bureaucratic challenges of teaching between departments and schools, and facilitate the cross-listing and cross-promotion of courses.

Rationale:

The Center for Science and Society was founded in the conviction that the challenges of the 21st century—such as those related to climate change and justice; access to technology; science policy and politics; legal expertise, social movements and science; or the global digitization of information—are too multidimensional for disciplines working in isolation. Tackling these challenges requires cross-disciplinary application of technical expertise and advanced knowledge, and all within the context of society's diverse political, social, cultural, and historical concerns. In the education of future scholars, research suggests students with interdisciplinary training are more engaged, excel on standardized tests, and find more creative solutions to problems.

Through the practice of co-teaching, each instructor will be able to teach to their strengths, sharing current and deep subject-based knowledge, while the collaboration facilitates problem-solving and enhances communication at the intersection of the fields.

The aim of this program is to introduce courses that can be offered (preferably co-listed) within current departmental structures, or as part of already-existing majors and concentrations, but that bring significant discussion of science and society into these offerings.

Requirements:

The competition is open to full- and part-time faculty and instructors at Columbia University, including Barnard College and Teachers College. Instructors may be tenured or tenure-track faculty, core lecturers, or lecturers in discipline. Groups of more than two faculty are eligible, although all awards will amount to \$3,000.

Ideally, at least one co-instructor must be from a STEM or related field (science, technology, engineering, or medicine), and at least one co-instructor must be from a non-STEM field, including but not limited to disciplines in the arts, humanities, law, and social sciences. Both instructors must commit to teaching at least part of the course.

All courses that meet the cross-disciplinary, co-teaching requirement are encouraged to apply. However, courses that could be integrated into a future curriculum in science studies, are on topics that focus on a major challenge or big question in science and society, and/or incorporate innovative project-based or experiential learning opportunities, will be prioritized.

Awardees must commit to teach the course at least once by fall semester 2021. Co-instructors are also required to participate in the Center's annual pedagogy workshop, held in late spring each year.

Please contact <u>scienceandsociety@columbia.edu</u> with any eligibility questions. If you have ideas for a course and are looking for a co-instructor, please let us know and we will try our best to facilitate a match.

Award:

Successful applicants will receive \$3,000 total to be used for the development and teaching of the course. Funds may be used to support research and development of the syllabus, including hiring research assistants, or to cover the direct expenses of the course (books, supplies and materials, photocopying, guest speakers, field trip expenses, etc.). Funds may be utilized as summer pay or additional compensation on a case-by-case basis (non-tenured instructors only, subject to Center for Science and Society and departmental approvals).

When required, follow-on funding may be available for the implementation phase of the course, including funds for teaching assistance or other needs not provided by the co-instructors' departments.

The Center for Science and Society will help to publicize the courses across the University and will feature them on its website. Administrative assistance will also be available to awardees to facilitate inter-school and inter-departmental issues that may arise in the development of the course.

To Apply:

In order to apply, please complete the <u>online form</u> and submit it, along with a 2-3 page proposal and a CV for each instructor. **See detailed proposal instructions, below**. Proposals will be judged by a multidisciplinary faculty panel organized by the Center for Science and Society.

PROPOSAL INSTRUCTIONS:

Please use the <u>online form</u> to submit your proposal. The following information will be required on the online form:

- Full names and contact information for each of the co-instructors
- Course information: title of the course, approximate number and type of students, which semesters the course will be offered
- A one-paragraph course description suitable for the course directory
- In which schools/departments/majors will the course be offered for credit? Will the course be cross-listed?
- How will the funding be used? Do you anticipate requiring follow-on funding? (no more than two paragraphs)

Upload your full proposal and a CV for each co-instructor. Proposals should be 2-3 pages and should include:

- A full description of the course, including
 - Main topics and the sequence in which they will be covered
 - Course objectives, specifying skills the students will gain
 - Pedagogical approach, describing how the students will be taught
- How the course will be evaluated, including
 - Description of the assignments on which student learning will be based
 - Methods of measuring student learning and evaluating course effectiveness
 - examples/samples of assigned reading and other course materials
- The roles of each instructor, including
 - The role each instructor will play in the course development, teaching, and evaluation process
 - Whether one or both instructors plan to teach the course more than once. Please describe why or why not.
- Rationale for the course, including
 - A statement of interdisciplinarity/cross-disciplinary learning
 - Why this course topic lends itself to co-teaching
 - Whether the course could be integrated into the curriculum for a current department or major OR integrated into a future curriculum in science studies,

- How the course connects to any major global challenges or big questions in science and society (not required, but encouraged)
- Whether you anticipate any challenges (instructional, administrative) in designing, teaching, or implementing any aspect of the course

Please contact scienceandsociety@columbia.edu with any questions.