Interdisciplinary and Integrated Collaborative Teaching Course Inventory

Overview

The GE allows students to take a single, 4+ credit course to satisfy a particular GE Theme requirement if that course includes key practices that are recognized as integrative and high impact. Courses seeking one of these designations need to provide a completed Integrative Practices Inventory at the time of course submission. This will be evaluated with the rest of the course materials (syllabus, Theme Course submission document, etc). Approved Integrative Practices courses will need to participate in assessment both for their Theme category and for their integrative practice.

Please enter text in the boxes below to describe how your class will meet the expectations of Interdisciplinary and Integrated Collaborative Teaching courses. It may be helpful to consult your Director of Undergraduate Studies or appropriate support staff person as you complete this Inventory and submit your course.

Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be *as specific as possible*, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Accessibility

If you have a disability and have trouble accessing this document or need to receive it in another format, please reach out to Meg Daly at <u>daly.66@osu.edu</u> or call 614-247-8412.

<u>Pedagogical Practices for Interdisciplinary and Integrated Collaborative Teaching Courses</u>		
Course subject & number		History or Microbiology 3704
Please answer the 3 questions below	V.	

"Collaborative"

Meaning and context: Teaching partners are expected to collaborate on (1) defining the objectives for the course, (2) putting together the course materials, (3) conducting the formal instruction of students, and (4) evaluating student performance. Note that courses in which one faculty member of record convenes the course and invites one or more guest speakers to take part in the class are not considered courses taught collaboratively. (Those courses may, however, utilize outside speakers when appropriate *in addition to* the primary faculty members of record.)

In the box below, list which two or more faculty members from what departments/units within which college(s) will engage in the interdisciplinary and integrated collaborative teaching. (This information should also be readily visible on the syllabus.)

Jesse J. Kwiek, Department of Microbiology (ASC) Thomas McDow, Department of History (ASC)

"Interdisciplinary"

Meaning and context: Participating faculty must be from *demonstrably* different disciplines, programs, or departments. (Think along the lines of Art & Molecular Genetics, Pharmacy & History, Public Health & Music, etc.)

In the box below, explain what the distinct disciplines and contributions of each faculty member are. Furthermore, explain where and how these will show in/contribute to the course GEN Theme. (This information should also be readily visible on the syllabus.)

Kwiek leverages his training in virology, epidemiology, and pharmacology to better understand virus-host nteractions and the public health impact of infectious diseases. McDow is a historian of Africa and the Indian Ocean world with a strong interest and current research in the history of HIV/AIDS and global health.

Kwiek and McDow each present a series of foundational lectures on the biology of viruses or African History, and the course aspires to convey broad and differing perspectives as a means of demonstrating the interconnectivity of scientific and humanistic learning. The interdisciplinarity of the course allows students to consider both viral and human factors that contributed to the zoonotic origins of HIV, its spread from Africa to the Americas, and to understand how cultural and political underpinnings contribute to the evolution of HIV drug resistance. Both faculty members are present for all lectures and class sessions, and they ask questions and comment on each other's lectures to model interdisciplinary curiosity and learning.

"Integrated"

Meaning and context: Interdisciplinary integrative teaching is different from multidisciplinary teaching where "faculty present their individual perspectives one after another, leaving differences in underlying assumptions unexamined and integration up to the students. In interdisciplinary courses [...] faculty interact in designing a course, bringing to light and examining underlying assumptions and modifying their perspectives in the process. They also make a concerted effort to work with students in crafting an integrated synthesis of the separate parts that provides a larger, more holistic understanding of the question, problem, or issue at hand." (Klein & Newell, 12)

In the box below, explain how the faculty members will be teaching the course together by being both present during all or most course meetings (at least 50% of the meetings) and bringing their different disciplines and perspectives into dialogue to address the GEN Theme. Exactly where and in what manner will this happen? What kinds of assignments will the students produce that demonstrate their ability to integrate the different disciplinary questions, methods, or knowledge to address the GEN Theme at hand? Be specific. (This information should also be readily visible on the syllabus.)

Kwiek & McDow created a 3-credit version of History/Microbiology 3704 in 2015 and have co-taught the course every spring since. While one instructor is generally the lead for each class, we frequently split a class period in half, with each of us offering a disciplinary perspective on a specific event. For example, we use the tools of molecular virology (e.g., phylogeny) to show the path that HIV took from Africa, through Haiti to the United States, which is followed by a discussion of the historical events that placed Haitians in Central Africa and made them a plausible means of HIV's passage across the Atlantic Ocean. Every other aspect of the class is a collaboration (student assessment, course design/refinement, etc.).

The proposed 4-credit version of this class adds a semester-long group project (Pecha Kucha [PK] presentation, appendix 1) that students work on, in class, for 1+ hr/week. In groups of four, students research and prepare a presentation on some aspect of HIV/AIDS that addresses a transformative, controversial, or unknown/ underappreciated aspect of the history of HIV, and students are required to use the tools of both history and science to tell their story. Kwiek and McDow mentor and evaluate the group work.

We spend time in class using historical primary sources and molecular virology to better understand several origin stories, including the origin of HIV (week3&4), the "origin" of HIV in the Americas ("Patient Zero", weeks 1&7), and the contribution of stigma, government policies, and pharmacology to the evolution of drug resistance. We assess student understanding through short quizzes, reflective writing and analytical writing. One example of reflective writing several weeks into the course is the prompt, "Please develop a metaphor or analogy that either uses the viral characteristics of HIV to explain colonialism or that uses characteristics of colonialism to explain the viral processes of HIV. We are interested in you showing what you know of both and drawing on material from the class. In your metaphor/analogy, please be specific about the ways that it works and the ways that it might not...How does your work with primary sources, photographs, or historical work influence your thinking? What aspects of viral replication or the natural history of HIV are most useful? The goal of this assignment is for you to be able to synthesize your knowledge and reflect on what you have learned in the class." One example of analytical writing occurs on the midterm exam, where students read a primary source (a 1983 telegram from the US Embassy in Zaire to the US State Department in 1983. Students answer questions combining their knowledge and what they see in the source, such as A) What local and global conditions led to the recruitment of "a considerable number of skilled Haitians... to serve as doctors, teachers, etc." (Line 65-66)? Why were they willing to go? B) What modes of transmission are left out of the telegram? What mode of transmission is most efficient? When you step back and assess the history of HIV/AIDS from its viral origins to the 1980s, which mode of transmission has been the most significant over time and why? Use at least three pieces of evidence to explain the significance of your choice and why you chose that mode of transmission over the mode that you consider next most important.