

May 18th, 2011

To whom it may concern:

This letter is intended to describe and detail the Bard College Citizen Science program as an innovative practice for the institution. This program focuses on providing a cornerstone of scientific literacy to all students in their first year of college level study. Students who are scientifically literate go on to become scientifically literate members of our global society. We believe that this curricular component will be an essential aspect for student understanding the of importance of sustainable practices, and encourage innovation and creativity in pursuing sustainable living.

The Citizen Science program enrolled students for the first time in January 2011. During this program all first year students at Bard spent 2 ½ weeks immersed in a common science curriculum taught by faculty recruited from all over North America, who came be Bard to specifically teach in this program. Our goal for this program is to increase the scientific literacy of all of our students by immersing them in an intensive, shared experience in which they learn to gather, interpret, and use evidence as scientists do.

Throughout the course of the program, students examined the topic of infectious diseases, learning about the symptoms and causative agents of infectious diseases, about disease transmission, where specific diseases are most prevalent and why, and what we can do to reduce the global burden of disease. As scientists, students designed and conducted experiments in the laboratory, explored the use of models to test assumptions and make predictions, and found patterns in data by exploring correlations between studies. While exploring the overarching question, “How can we reduce the global burden of infectious disease?” students engaged in three rotations of study, in the wet laboratory, in a computer modeling laboratory environment, and in a problem based learning classroom.

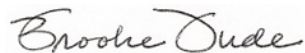
The program is mandatory for all first-year Bard students. The curriculum of Citizen Science is taught in an immersion classroom style, the course is taken alone, without any other curricular demands on the student. The curriculum is designed to interest and challenge all students, regardless of their past science experience. The makeup of each section of students was also carefully designed to have a mixture of science and non-science majors in the same classroom, allowing for the sharing of ideas and experiences in a unique fashion. Also, the program is ungraded and has numerical impact on students’ grade point averages, allowing students freedom to reach beyond their comfort level in science, and realize levels of competency that they might not have previously been assured of.

The classroom experiences were complemented by a rich series of civic engagement opportunities. This portion of the extracurricular activities were added to the Citizen Science

program in order to provide students with time to be re-oriented to the available civic engagement opportunities campus and the surrounding communities. The set up of the singular course format, with limited homework and studying requirements gave the students a chance to freely participate in opportunities that they previously might not have had time for, or had not been aware of. Bard currently has very active civic engagement projects in New Orleans, Palestine and Nicaragua, as well as some locally in the Hudson Valley. We were able to highlight some these programs during January by having outreach experiences with local schools, teaching Bard students basics in carpentry and plumbing (to help provide students with concrete skill sets to volunteer organizations) and organizing student work at local food banks and shelters, among many other planned events. We currently have a group of students meeting weekly to continue science nights and mentoring relationships at the local elementary schools, in a direct relationship to an opportunity experienced during the Citizen Science program.

We feel that the Citizen Science program is an essential addition to the high quality liberal arts education that Bard College provides. This program has the potential to influence students to become more scientifically curious and also be scientifically literate members of the global community.

Sincerely,



Brooke A. Jude
Director, Citizen Science Program
Bard College