POETRY AND SCIENCE

Course Description

Both poetry and science are products of human wit. Both have histories which, if separable from each other, are at least sometimes intermingled and mutually influential. Both are attempts to express in appropriate symbols-to render amenable to contemplation- as much as possible of the rich panorama of amalgamated human experience and gross existence. Their affinity, however, does not seem altogether confined to these generalities, and the two in some respects appear as deeply similar instruments in the endeavor to symbolize and communicate with reference to experience and existence.

Course Objectives

Both art and science allow us to confront or grasp reality, and it is enlightening to compare the ways in which they make it possible. Whether the end result is a work of art or science, the act of creating has many similarities. At the same time, the differences between the two disciplines can reveal much about the nature of both.

Scientific concepts themselves can also be used to describe and aid the understanding of some aspect of art. These concepts can also influence or inspire artists who use science as the subject matter or basis of their work.

A main objective of this class is to familiarize students with ideas, concepts, and relations of poetry and science. The seminar is designed to give students exposure to interdisciplinary research and to show them how approaches to the same topic differ between disciplines. Another goal of the class is to teach students to analyze scientific papers critically. Active class participation is essential to the success of the seminar and will be encouraged by contrasting findings from scientific research with the students' own intuition.

Course Requirements

This seminar is a two-unit class that meets once a week for two hours at a time. The seminar is going to be graded only **Credit** or **No Credit**. Two-unit classes require less work than four-unit classes, so you can sign up, earn a couple of extra units, and learn about something completely different from your major or minor. The class is open to all students from any major. Students in

economics, history, sociology, philosophy, communication and journalism, and international relations are especially welcomed. There is NO prerequisite for the class.

Participation

The Class will meet **2 hours each week in a seminar format.** Active, effective contribution to seminar discussion is the most important expectation of participation in the course. Each session will cover one theme as per the syllabus of the course. Students will be encouraged to participate actively in the discussion. Students are expected to read the materials. There will be no control of the readings, but it is assumed that the readings included in the syllabus will help considerably the understanding of the subject, thus the elaboration of the papers and the participation in the discussion in class.

In this class, we will use Mary Midgley's recent book *Science and Poetry* to look at findings from economics, history, psychology and sociology about the role of intellectual life in the 21st century. In addition, students are expected to read papers that are going to be posted on the seminar website and will complement the readings in the book.

Grading

There are two requirements to pass this class: *Reading* and *Talking*. Each student will prepare two presentations. Students are completely free to organize their talk from different perspectives to help them improve their creative and original thinking.

- 1st Presentation: *15-minute Talk*

  Each student will do a small scale presentation, which cannot exceed 15 minutes. This presentation will include the analysis of a scientific paper critically.

- 2nd Presentation: *30--minute Talk*

  Each student will do a large- scale presentation, which will be around 30-45 minutes. This presentation will include the overall views of the students regarding interactions of the science poetry in the new century.

The students may also be inspired by any sentence or paragraph appears in the books, press, etc. Students, in this case, present their ideas based on the arguments that they are interested in.

Selected Readings

[1] **Arnett, Willard E.** "Poetry and Science." *The Journal of Aesthetics and Art Criticism,* June 1956, 14(4), pp. 445-452.

[2] **Bessis, Marcel.** "Science, Dreams and Poetry." *Leonardo,* Autumn 1979, 12(4), pp. 316-20.

[3] **Brooks, W. K.** "Science or Poetry." *Science,* October 1895, 2(40), pp. 437-40.

[4] **Drake, Stillman.** "Galileo's Language: Mathematics and Poetry in a New Science." *Yale French Studies,* 1973, 49, pp. 13-27.

[5] **Gottschalk, Robert.** "Science and Poetry." *Science,* March 1955, 121(3143), pp. 444-45.

[6] **Larrabee, Eric.** "Science, Poetry, and Politics." *Science,* April 1953, 117(3042), pp. 395-99.

[7] **Pevsner, Antoine.** "Science Foils Poetry." *Leonardo,* Autumn 1977, 10(4), pp. 324-25.

[8] **Stewart, George R.** "Color in Science and Poetry." *The Scientific Monthly,* January 1930, 30(1), pp. 71-78.

[9] **The Poetry-Science Connection**
http://www.garfield.library.upenn.edu/essays/v6p223y1983.pdf

[10] **Further Reflections on the Poetry-Science Connection**
http://www.garfield.library.upenn.edu/essays/v9p048y1986.pdf