

GE CRITERIA APPROVAL FORM

Course Number and Title: PHSC 170. Foundations in Physical Science (4)

Faculty Member(s) Proposing Course: Philip Hampton, Simone Aloisio, Geoff Dougherty

Indicate which of the following categories would be satisfied by this course by marking an “X” on the appropriate lines.
Courses may be placed in up to two GE categories as appropriate. Upper Division Interdisciplinary GE courses may be placed in two categories plus the UDIGE category.

	A1: Oral Communication
	A2: English Writing
	A3: Critical Thinking
X	B1: Physical Sciences
	B2: Life Sciences
	B3: Mathematics
	B4: Computers and Technology
	C1: Fine Arts
	C2: Literature
	C3: Languages & Cultures
	D: Social Perspectives
	E: Human Psychological & Physiological Perspectives
	Upper Division Interdisciplinary GE

Lab Included? Yes No

Please provide a brief explanation of how the proposed course meets each of the criteria for the selected General Education categories.

All Category B courses shall:

- Promote the understanding and appreciation of the methodologies of math or science as investigative tools and the limitations of mathematical or scientific endeavors

This course will examine basic chemistry and physics principles. The course will discuss the Scientific Method and how it is applied to Chemistry and Physics problems, and the limitations of the Scientific Method. In addition, the strengths and limitations of chemistry and physics methodologies will be examined.

- Present mathematical or scientific knowledge in a historical perspective and the influences of math or science on the development of world civilizations, both past and present

The course will present a historical perspective on the development of the fields of chemistry and physics, and the impact of these chemical and physics developments on civilization and society will be discussed.

- Apply inductive and deductive reasoning processes and explore fallacies and misconceptions in the mathematical or scientific areas.

The application of deductive and inductive reasoning processes is fundamental to the understanding of chemistry and physics. Students in the course will be taught how to reason from experimental data to form conclusions regarding chemical and physical concepts. In addition to presenting examples of good reasoning, students will learn to differentiate good reasoning from fallacies, misconceptions and poor reasoning, for example in the alleged “cold fusion” process for energy generation.

Category B-1 Physical Sciences—Chemistry, Physics, Geology, and Earth Sciences courses shall:

- Present the principles and concepts of the physical sciences and the physical universe.

The course will focus on a discussion of chemistry and physics principles and concepts and their impact on society.