

Minutes of Integrated Science Meeting on 4/1/2008

Members Present: Brian Loft, Rick White, Paul Loeffler, Solomon Schneider, Marcus Gillespie,
Doug Constance, Todd Primm, Matt Rowe, Chris Baldwin

The meeting convened at 3:35 and ended at 4:55.

Issues discussed: Rationale and Objectives for the course

The following statement of the rationale and objectives were approved by a majority vote (8 in favor, 1 abstain)

Course Description/Rationale

The goals of this integrated course are three-fold: 1) The first goal is to provide our students with a more complete understanding of science by teaching them the basic principles, facts, laws, theories, and terminology from the sciences of physics, astronomy, chemistry, geology, climatology, biology, and, when relevant, from psychology. 2) The second goal is to improve student understanding and appreciation of science as a proven and reliable method of enhancing our understanding of the natural world, and to help them distinguish scientific from non-scientific and pseudoscientific ways of thinking about the world. 3) The third goal is to teach students how to use specific rules of critical thinking and their knowledge of science and the scientific method to make more informed decisions. All three goals are inseparable and are interwoven throughout the course.

These three goals will be accomplished, in part, by using information from the natural sciences, the scientific method, and rules of critical thinking to examine a range of claims that are common in our society. Through an examination of these and other topics, as well as the evidence for key scientific theories, students will learn more about the nature of science and the scientific method and how to more reliably evaluate the veracity of claims. They also will gain a greater appreciation of the beauty, wonder, and interconnectedness of the natural world as revealed by science.

Objectives

1. Increase students' understanding of the applicability and reliability of important scientific principles and the collective approach that led to their establishment.
2. Engender a more positive appreciation of science.
3. Enhance students' appreciation for the role of science in their daily lives and the need for science literacy in our technologically advanced societies.
4. Strengthen students' critical thinking skills through illustrations and applications of scientific reasoning and their role in scientific discovery.