

TxCETP Course Component:

Understanding Scientific Inquiry “The fly, the raven and the scientist”

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I. Introduction

Overview of Course Component:

The Scientific Inquiry Course Component is designed to facilitate an appreciation for, and an accurate assessment of, the nature of scientific approaches to solving problems. The activities included in the Course Component require students to: 1) acknowledge potentially inaccurate, prior conceptions regarding the nature of science, 2) apply their understanding of the scientific process to a new scenario and 3) actively develop a higher level of appreciation for the scientific accomplishments discussed throughout the course.

Objectives of Course Component:

The student is expected to develop an appreciation for the scientific process and during the activities associated with the Course Component, students will: clarify their understanding of the nature of science, plan and implement investigative procedures, develop scientific questions, and formulate testable hypotheses. They will also analyze, review and critique scientific explanations as to strengths and weaknesses.

Overall Time Frame for the Course Component:

Approximately two, fifty minute classes, plus 20-30 minutes in several subsequent lectures

Prior Knowledge: None