

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 2006 Volume V: Engineering in Modern Medicine

Interdisciplinary Applications of Chemistry through Engineering in Modern Medicine: CSI New Haven

Guide for Curriculum Unit 06.05.07 by Marcela A. Oliveira-Antunovich

This unit has been designed with the focus of integrating scientific disciplines through the use of modern interests in forensic science. Even though the main focus is chemistry, the unit has been created so that inclusion of biology and physics concepts can be intertwined in order to provide students with a more concise understanding of the realm of forensic science and crime scene investigation.

The aim is to provide students with a scientific experience that is both educational and entertaining, through hands-on inquiry driven activities. The expectation of the unit is that students will be given the opportunity to understand forensic science, the laboratory environment, as well as the education requirements for forensic scientists.

At the initiation of this unit, the teacher should provide students with unique scenarios that contain alternate outcomes. By doing so, students will each be given unique problems to solve and methods of analysis. The timeframe for this unit should be no less than 3 weeks so that both students and teachers gain the most indepth applications of the topics at hand. In the last week, time should be allotted so that students present on their findings.

(Developed for Honors Chemistry and AP Chemistry, grades 10-12; recommended for High School Science courses, grades 10-12)

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