

Module Report Forensic Chemistry

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Lesson Content

Forensic Chemistry and English Composition

Target Grades

This particular lesson can be revised in a manner to make it appropriate for any level from elementary through college.

This module features a cross-curricular team teaching approach to science and creative writing or technical writing. "Clues" from a chemistry/biology lab project will be used to create a short mystery story for English class in addition to (or perhaps instead of) the traditional lab report.

Adademic Areas

Literature and Science

State Goals, Academic Standards and Benchmarks

3.B.5

13.B.5a-5e

Plan

The instructor will provide a crime scene scenario that will be the basis for one or more laboratory experiments, depending on the grade level (see attached example of scenario). The students will design appropriate experiments that will allow them to analyze the "clues" in a laboratory setting. A specific example that could be used with the attached scenario for students at the late high school level is the designing and implementation of a polarizer. This would involve selection of materials suitable for containing the liquid, configuration of the instrument, and utilization of the finished product. This would be appropriate for analysis of the suspected poison presented in the scenario. With proper guidance, this would involve all activities related to State Goal 13.B.5a-5e.

Students would then take the results from the various lab analyses and present them in one or more of the following manners:

- A technical lab report
- A police report that might be used in court
- A short detective story

These writing activities would encompass the intent of State Goals 3.A.5, 3.B.5, and 3.C.5.

Technology Tools

- Computer for collecting, analyzing, and displaying data
(See module titled "Using the Computer to Collect Scientific Data in the Chemistry Lab.)
- Probes to accompany the above
- Word processor to write report

Materials & Supplies