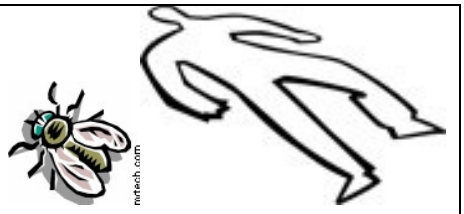
VAMPY 2011

Forensic Chemistry
Susan Morgan, Instructor



Text: *Forensic Science For High School*, 2nd edition, Barbara Deslich,
Laboratory Manual: *Lab Manual for Criminalistics*, Richard Saferstein

Your Teacher: Ms. Morgan is a Bowling Green native, and recently obtained National Board Certification for teaching chemistry. She earned B.S. degrees from W.K.U. in Biology, Chemistry, and Medical Technology, and an M.S. degree in Chemistry education. She has over a decade of experience in the medical reference laboratory with national certification in cytogenetics. She has spent the last 5 years as a forensic science, pre-AP chemistry, and genetics teacher at Bowling Green High School, and the 8 previous years as the W.K.U.-SPAN (dual-credit) chemistry teacher at Warren Central High School. Ms. Morgan is also a part-time chemistry instructor for the WKU chemistry department. She established the VAMPY forensic chemistry course in 2004.

Course Description: This course is an investigation into the methods employed by the forensic chemist. Students will analyze crime scene simulations and explore the evolution of forensic chemistry in the last century. Laboratory topics include: serology; toxicology; DNA and fingerprint analysis; arson, firearm, and explosives investigation; document, hair, fiber, and paint microscopy; and forensic entomology. Discussions will explore the depiction of forensics in contemporary media and an ethical decision making model concerning the fate of a serial killer. The students' knowledge of chemistry and biology will expand along with their deductive reasoning skills. They will also read and discuss a non-fiction account of a local murder trial.

Course Outline: (Dates subject to change due to weather, scheduling conflicts, etc.)

Week #1

M	Chapter 1 - Introduction to Forensic Science/Deductive Reasoning
T	Chapter 2 – Types of Physical Evidence
W	Chapter 3 – The Crime Scene
Th	Chapter 4 – Fingerprint Analysis
F	Chapter 5 – Hair Analysis, Chapter 6 – Fiber Analysis

Week #2

M	Chapter 7 – Drug Analysis
T	Chapter 8 – Toxicology: Poisons and Alcohol
W	Chapter 9 – Trace Evidence
Th	Chapter 10- Soil and Glass Analysis
F	Chapter 11 – Forensic Serology

Week #3

M	Chapter 12 – DNA Analysis
T	Chapter 13 – Forensic Entomology
W	Chapter 14 – Human Remains
Th	Chapter 14 – Firearms, Toolmarks, and Impressions
F	Chapter 15 - Document and Writing Examination

*Study hall assignments will include text work.