

CSI – FORENSIC CLASS

Laura Erlig, Instructor

Course Objective:

Students will develop basic skills in observation, data collection and data analysis. They will understand and perform scientific inquiry as they delve into different mysteries. Students will analyze and synthesize several pieces of data to draw a conclusion to being able to solve two different cases. Students will be able to recognize and explain the limited role hair analysis and questioned document (QD) analysis can play in a forensics investigation as well as other forensic techniques.

National Standards Addressed:

- Abilities necessary to do scientific inquiry
- An understanding of properties and changes of properties in matter
- An understanding of structure and function in living systems
- An understanding of science and technology in society
- Analyze and synthesize several pieces of data to draw a conclusion

Course Expectations:

- Attend all classes unless ill. No make-ups will occur
- Arrive on time and prepared
- Be open to ideas and to work safely
- Complete assignments
- Be willing to discuss and evaluate your progress open and honestly
- Read all materials assigned
- Bring two pencils, pens, folder, and spiral notebook

Class Syllabus:

- 1 Introduction to Forensics and the Mystery: Review the Forensics Terms and FAQ sheet. Hands-on centers to work on Forensic Vocabulary. After being introduced to the mystery, we will brainstorm in groups to compile a list of suspects and possible evidence.
- 2 Agilent CSI kit to solve a mystery and work on understanding evidence and critical thinking.
- 3 Paper Chromatography Lab: We will perform paper chromatography on ink samples collected from three different pens and the partial ransom note that Liz found in the trash can. Students will analyze the chromatograms to determine which type of pen could have been used to write the note.
- 4 A Closer Look at the Partial Ransom Note: We will study the partial ransom note found in the trashcan from the perspective of a QD examiner. We will first learn about QD analysis and then apply their knowledge in an attempt to identify the author of the ransom note.
- 5 Finger Printing Kit from Agilent
- 6 Explore the CSI website and delve more into what it is to be a forensic scientist. Solve a mystery online.
- 7 Put our skills to the test with one final mystery.
- 8 FINAL MYSTERY SOLUTION