

## **Unit 2: Common Trace Evidence**

**Estimated Topic Length:** 3 weeks

### **Objectives:**

1. Identify the various parts of hair.
2. Describe variations in the structure of the medulla, cortex, and cuticle.
3. Distinguish between human and nonhuman hair.
4. Determine if two examples of hair are likely to come from the same person.
5. Explain how hair can be used in a forensic investigation.
6. Distinguish hairs from individuals belonging to the broad racial categories.
7. Identify and describe common weave patterns of textile samples.
8. Compare and contrast various types of fibers through physical and chemical analysis.
9. Describe principal characteristics of common fibers used in their identification.
10. Apply forensic science techniques to analyze fibers.
11. Distinguish between pollen and spores.
12. Define a pollen fingerprint.
13. Classify the different organisms that produce pollen and spores.
14. Summarize the different methods of pollination in plants and the relevance in solving crimes.
15. Identify the different ways that spores are dispersed.
16. State characteristics of pollen and spores that are important for identification in forensic studies.
17. Summarize how pollen and spore evidence is collected at a crime scene.
18. Describe how pollen and spore samples are analyzed and evaluated.
19. Recognize various soil types and describe some methods for examining soil samples.
20. Distinguish sand samples by size, color, and composition.
21. Explain how soil analysis can link suspects to crime scenes.

### **Textbook Chapters:**

- 3 (Hair)
- 4 (Fibers & Fabrics)
- 5 (Pollen & Spores)
- 12 (Soil)