

# Forensic Entomology at the Crime Scene Syllabus (16 Hours)

#### **Course Target Audience**

Forensic professionals, crime scene investigators, death investigators, police officers and detectives with beginner to advanced skills in the identification, documentation, collection and preservation of physical evidence.

## **Course Objectives**

Understand how entomological evidence is used in legal investigations

Examine the current limitations in forensic entomology

Demonstrate proper collection, storage and rearing of forensically important insects

Understand and utilize proper shipping methods for entomological evidence

# **Required Equipment**

Camera
Camera related equipment
Scale

#### **Course Schedule**

DAY ONE. (8 hours)

Check-in and class introductions (0.5 hours)

## Module 1 – Introduction to Insects (1 hour)

- Terminology
- Biology of insects
- Insect anatomy

#### Module 2 – Introduction to Forensic Entomology (2 hours)

- Role in legal investigations
- Three areas of the field
- Biology of important flies & beetles
- Succession & decomposition in relation to insects
- Forensic entomology terminology

Practical Exercise 1 – Insect Anatomy & Biology Review (0.5 Hour)
Practical Exercise 2 – Using insects in legal investigations (0.5 Hour)

# Module 3 – Proper Documentation, Collection, Preservation & Shipment of Entomological Evidence (2 Hours)

- Identify insects as evidence
- Environment/scene data collection & documentation
- Entomological collection kits
- Proper collection & preservation
- Proper shipment of entomology evidence

Practical Exercise 3 – Working through the entomological collection kit (1 hour)

Day 1 written quiz (0.5 Hours)

#### DAY TWO. (8 hours)

# Module 4 – Forensic Entomology Analysis & Reports (1.5 hours)

- How evidence is analyzed
- Time of colonization determination
- DNA evidence
- Identifications
- Case report overview

Forensic Entomology Case Review (1.5 hours)

#### **Student Laboratory Practical (2 hours)**

In a lab setting, students will examine insect samples, observe preserved and live specimens related to forensic entomology and review proper handling of specimens.

# **Student Field Practical (2 hours)**

In a mock crime scene setting, students will use proper techniques to document, collect and preserve entomological evidence. Students will then practice proper packaging and shipment requirements.

Day two written quiz (0.5 hours)

Certificate ceremony (0.5 hours)

Quizzes and tests are used for student self-assessment only. Grades are not recorded by instructor.