Syllabus for (11:370:415)

DECOMPOSITION ECOLOGY

(3.0 credits)

Instructor: Denise Gemmellaro (Md161@scarletmail.rutgers.edu)

Semester, Period & Format: Summer; M-F (all day 6/20-7/1) Lecture/lab/Field

Location: New Jersey School of Conservation, Sussex County

Pre-requisites: 11:370:202 or 11:370:381 (suggested)

Suggested Texts:


<table>
<thead>
<tr>
<th>Class</th>
<th>Lecture</th>
<th>Lab/Field Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction &amp; History of Forensic Entomology</td>
<td>Setting up a decomposition ecology experiment</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Insect Anatomy</td>
<td>Visit several “crime scenes”; evidence collection</td>
</tr>
<tr>
<td>3</td>
<td>Lab: Insect Orders, Flies &amp; Beetles</td>
<td>Visit several “crime scenes”; evidence collection</td>
</tr>
<tr>
<td>4</td>
<td>Fly &amp; Beetle Development</td>
<td>Visit several “crime scenes”; evidence lab analysis</td>
</tr>
<tr>
<td>5</td>
<td>Collection &amp; Rearing</td>
<td>Rearing evidence in lab</td>
</tr>
<tr>
<td>6</td>
<td>Aquatic Ecosystems</td>
<td>Lab colonies; collection from aquatic scenarios</td>
</tr>
<tr>
<td>7</td>
<td>Estimating PMI</td>
<td>Mounting maggots on a slide</td>
</tr>
<tr>
<td>8</td>
<td>Problems in Estimating PMI</td>
<td>Identification of problematic specimens</td>
</tr>
<tr>
<td>9</td>
<td>Case work discussion</td>
<td>PMI estimate base on the evidence collected</td>
</tr>
<tr>
<td>10</td>
<td>Problems with forensic analysis procedures</td>
<td>Preserving evidence</td>
</tr>
</tbody>
</table>
Course Learning Goals:

- Attain mastery in field practices and study of forensic entomology
- Gain professional experience in forensic entomology

Student Learning Assessment: [% of final grade]

- Two hourly exams are given during lecture periods [50%]
- Five laboratory identification quizzes [20%]
- Term paper [10%]
- Class attendance and participation [20%]

Contact Information:

Denise Gemmellaro
Thompson Hall
848-932-9774
Mdg161@scarletmail.rutgers.edu
Office Hours by arrangement