ENTM 418

Advanced Criminalistics

Course Schedule & Syllabus

Fall Semester 2009
This is the third of a 3 course series, designed to provide the student instruction on techniques in crime scene evidence collection, documentation and analysis. You must have taken ENTM/HSCI 218, ENTM/HSCI 318, and ENTM/HSCI 319; and obtained a grade of C or higher to take this course.

Patrick Jones, Entomology, Smith 150 or 152
Forensic Lab Director
Phone: 49-45963
E-Mail: pjones@purdue.edu

Ralph Williams, Entomology, Smith B9
Professor of Entomology
Phone: 49-44560
Email: rew@purdue.edu

WARNING: Due to the graphic nature of this class and its contents, those who feel they might exhibit a problem with some of the more explicit material that will be shown or discussed during class should exercise caution. If there are any concerns please contact one of the instructors for guidance.

Notice: Federal copyright laws and Indiana State statutes relevant to deceased individuals prohibit the copying, videotaping or publishing of such images and case details by any means including but not limited to internet, hard copy, magnetic media or electronic transfer of any kind. You may not use a camera or cell phone camera in lecture to capture displayed material.
LABOR DAY NO LECTURE

SCHEDULE:

Week 1  Week of August 24
Lecture 1: CSI and How to Write a Report [Jones]
Lab 1: Review: reports, equipment check, imaging submissions, lab exercise. The case of “I know what you did last summer!” {30 points}

Week 2  Week of August 31
Lecture 2: Blood Evidence [Jones]
Lab 2: The case of “Who was that drip I saw you with last night?” {30 points}

Week 3  Week of September 7
Lab 3: Labor Day Week. The beginning of lab will be a short lecture on: Advanced imaging techniques and evidentiary requirements for digital images. [Jones] The case of “Say Cheese.” {30 points}

Week 4  Week of September 14
Lecture 3: Entomology [Williams]
Lab 4: The case of “The fly up the nose”. {30 points}

Week 5  Week of September 21
Lecture 4: Vehicular accident and investigation [Jones]
Lab 5: Case of “Was he wearing a seat belt?” {30 points}

Week 6  Week of September 28
Lecture 5: Medicolegal death investigation. [Jones]
Lab 6: The case of “The Mortis Brothers.” {30 points}

Week 7  Week of October 5
MID TERM EXAM
Lab 7: Note a short lecture on fire and explosives will be given at the beginning of the laboratory: The case of “Burn, baby burn.” {30 points}

Week 8  Week of October 12
No lecture—October Break
October Break—No Lab

Week 9  Week of October 19
Lecture 6: Locks, locking devices and the methodology of the burglar. [Jones]
Lab 8: The case of “The Pink Panther Strikes Again”. {30 points}

Week 10  Week of October 26
Lecture 7: Forensic Soil Analysis [Williams]
Lab 9: “Its not dirt, its soil”. {30 points}
Week 11  
**Week of November 2**  
Lecture 8: The physical attributes of child abuse. Pattern Injuries [Jones]  
Lab 10: The case of “Rub-a-dub-dub”. {30 points}

Week 12  
**Week of November 9**  
Lecture 9: Casting Techniques [Williams]  
Lab 11: The case of “Tracking Mr. Goodyear and Ms. Nike.” {30 points}

Week 13  
**Week of November 16**  
Lecture 12: Advanced latent fingerprint development and recovery techniques. [Jones]  
Lab 12: “The case of “Tape, paper, glass, and surfaces too fierce to mention.” {30 points}

Week 14  
**Week of November 23**  
Lecture 13: A Clown Without Pity.” [Jones]  
**No Lab—THANKSGIVING**

Week 15  
**Week of November 30**  
Lecture 14: Micro Trace Analysis [Williams / Jones]  
Lab 13: Trace Analysis The case of “Istsey Bitsey, Tweeny Weeny”. {30 points}

Week 16  
**Week of December 7**  
Lecture 15: Courtroom procedures relative to evidence and testimony. [Williams / Jones]  
Lab: “I’ve got to go to court???” [Jones]
Qui loquitor pro victima. By now, you should know what this means and it should be your motto. *We do!*

**This is ENTM/HSCI 418.** This is not an easy course. We expect professionalism from you and your best. Your reports will be scrutinized more closely than in 319.

1. Each week, you and your partners will receive an assignment. You will not have the details of the assignment until the day of your lab period just like in the real world. The instructors’ strongly suggest that you do not tell students in other divisions (lab periods), the details of the case. This will only give them an advantage. The scenarios will be given to you verbally and in hard copy.

2. The lab exercises may be inside, outside or in multiple locations. Some of the assignments will require you and your partners to carry out on your own in an environment that you choose. Labs outside will be rain or shine.

3. Dress appropriately for lab. You may need to stoop, crawl or get dirty. Designer clothes, unlike on TV, are discouraged. Open toed shoes are prohibited.

4. You will decide what report forms are necessary based on the nature and type of case.

5. Lab assignments will be submitted by each member of a team. Images, data and evidence will be shared by all team members unless specific instructions to the contrary are given by the instructor.

6. You will use the PDF templates on the required CD to write your reports. All reports will be typed. There are directions on the CD explaining how the reports should be completed. Print this 6 pages of instructions. Use it as a reference. You may print blank copies of the reports to use as check lists, however the submissions will be typed. You will still have to draw in diagonal lines in areas and on lines which have no data inserted in them, as required. Don’t forget the word “end” as the last word in a narrative section.

7. The reports and associated material (drawings, images, etc.) will be submitted in a 9x12 paper envelope. On this envelope will be the following information (in this order):
   a. Name (Last name first then first name – do not use an initial only. *Print clearly.*
   b. Your lab day and time, i.e. Wednesday 13:30 (we use military time).
   c. The lab exercise number, i.e. #3.

8. You may reuse the envelope, however, it is recommended that you have several in case the previous week’s submission was not returned in time for you to reuse the envelope. This is your responsibility. If you do not have an envelope you must obtain one and submit it by depositing it in the slot in Smith Hall, Room 151.

9. Evidence collected will be indicated on each individual’s report submission, however only one set of evidence will be submitted.

10. Crime scene drawings will be done on graph paper, ¼ inch squares (available at all the bookstores. Wal-Mart, Walgreens, Staples, etc.). Use a ruler when you draw lines. Print neatly on these drawings.

11. Images will be submitted printed. The images may be wallet size (1½” X 2”).

12. Your grades and other pertinent information concerning this class will be on the website: https://courses.foodsci.purdue.edu/entm418/
Required Material for Lab Assignments:

CSI Reports by Patrick Jones, CD, available from the Forensic Science Club: Note: this is the same CD used in ENTM/HSCI 319.  

Purdue Evidence Kit Level II (Note: this is the same kit used in ENTM/HSCI 319) – If you do not have one, you may obtain one from the Forensic Science Club.

Kit Includes:
- Case
- Magnifying Glass
- Packaging Tape 1.88”x yards, Clear
- Tape Measure 16’
- Tweezers / Forceps
- 2 ½ inch locking blade knife
- Sharpie Marker
- String, light, approximately 35 ply
- Bichromatic Fingerprint Powder
- Scissors
- Latent Fingerprint Brushes, Camel (2)
- Bi-chromatic Magnetic Latent Powder
- Cotton Tip Applicator (100)
- Evidence Envelope 3.5x5” (10) [Supplied by lab]
- Evidence Bag, small, (10) [Supplied by lab]
- Scale, 6” ruler (2) [Supplied by lab]
- Flash light, with extra batteries
- Pen (black ink) and pencil #2 (mechanical preferred)
- Graph Paper (Purdue Form C only)
- Dry erase marker, black
- Tool kit
- Rain poncho

Note: This is a minimum list. If you feel you should have something in addition to this list, by all means, place it in your kit. It is the student’s responsibility to insure that the kit is fully stocked and that there are enough evidence bags and envelopes (available in the rear of SMITH Room 125. The bags and envelopes are there, you must use the stamp to stamp the evidence bags).

Digital camera
- Each student must have a digital camera. Macro capabilities are a plus.
- Carry extra batteries for the camera. If you cannot take photos because your batteries are not charged or if your batteries are dead, then you are not prepared.
- The camera must have a built in flash.
- Cell phone cameras will not be allowed.
Final exam during finals week. Date and time to be announced. The mid term and final are accumulative respectively.

Grading:

<table>
<thead>
<tr>
<th>Check YACS - Grades.</th>
</tr>
</thead>
<tbody>
<tr>
<td>[<a href="https://courses.foodsci.purdue.edu/entm418/">https://courses.foodsci.purdue.edu/entm418/</a>]</td>
</tr>
</tbody>
</table>

Final grades will be determined as follows based on a total points:

<table>
<thead>
<tr>
<th></th>
<th>Mid Term</th>
<th>200 Pts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Final</td>
<td>200 pts</td>
</tr>
<tr>
<td></td>
<td>Labs</td>
<td>390 pts</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>790 pts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent</th>
<th>GPA Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>89.5 - 100</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>79.5 - 89.4</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>69.5 – 79.4</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>60.1 – 69.4</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60.0</td>
<td>0</td>
</tr>
</tbody>
</table>

Grade Policy:

Attendance Policy:

- Due to the nature of the labs, there are no provisions for lab make up. Each request will be evaluated on an individual basis. Lab makeup will consist of a paper assigned by the instructor.
- Documentation of the absence must be provided.
- Excused absences are generally limited to Purdue University activities, health problems, family emergencies and interview trips. (These must be documented).
- Any missed exams must be made-up within 7 calendar days of the student’s return to school. Exams may be made up only if an excused absence is approved by the instructor.
- There are no provisions for “extra credit”. We do not grade on the curve.

Purdue Emergency Procedures. This is the Reference Guide for possible emergencies at Purdue. These emergencies may be snow shutdown or other interruptions of class. For a Reference Guide that covers these items, please go to
In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Here are ways to get information about changes in this course. YACS web page [https://courses.foodsci.purdue.edu/entm418/], my email address: pjones@purdue.edu, and my office phone: 494-1079. Ralph Williams 765 494 4563, rew@purdue.edu.

HELPFUL HINTS FOR SUCCESS IN ENTM 418:

TAKE THE TIME TO LEARN NEW WORDS AND CONCEPTS – You will be expected to know all the material presented and any reading assignments even if it might seem trivial to you.

HAVE FUN AND ENJOY THE OPPORTUNITY TO LEARN – from content and instructors about this fascinating field of Criminalistics.

ASK QUESTIONS – Instructors are happy to reply to your questions.

TURN IN ALL OF YOUR ASSIGNMENTS – They add up and affect your grade. Do not fall behind, turn them in on time.

HAVE YOUR ASSIGNMENTS READY WHEN YOU COME TO LAB – Don’t be looking for an envelope to put your assignment into. Have it ready to hand in.

Purdue Forensic Science Website:
http://www.extension.entm.purdue.edu/forensics/

Purdue Forensic Science Club Website:
http://web.ics.purdue.edu/~pufsc/

Patrick Jones Website
http://www.crimesceneforum.com