JS 112
Criminalistics

Course Description:
This course covers fundamental theories of physical evidence, practically applied, and the legal considerations involved in its recognition, collection, preservation and presentation in court. Students will learn the appropriate methods for securing and processing different types of crime scenes, as well as how to search for and document evidence. Topics include latent fingerprints, scene photography, impression evidence, firearms, questioned documents, trace evidence, and death investigations.

Course Text and Materials
Required Texts:
- Criminalistics 112 Course Reader (Maple Press, 481 E San Carlos St)

Course Format
The course will include lectures by the instructor, class discussions, powerpoint presentations, films, and crime scene exercises. Text will be supplemented with documents posted on the class website. Students must complete the assigned readings before the topic is covered in class.

Course Requirements
- Exams (2x100 pts): Two exams will be given in this course. Exams will be cumulative and will include all material covered up to the date of the exam. Exams will include multiple choice, matching, true/false, diagrams, drawings and sketches, and short essay.
  
  Midterm       Monday March 17
  Final

- Quizzes (2x25pts): Quizzes on assigned readings, lectures, group activities and other assigned materials will be given during the semester.
- **Homework (5x10 pts):** There will be 6 homework assignments in the term. You are required to complete 5 of them. You may complete the 6th homework for up to 10 points extra credit. Homework MUST be in hardcopy format – no email submissions will be accepted, and no late homework will be accepted for any reason.

- **Crime Scene Exercises (200 pts):** There will be 6 crime scene exercises during the semester. These will include Crime Scene Diagrams, Latent Fingerprints, Footwear Impressions (inked or cast), Bitemarks, Bloodspatter interpretation, and a mock crime scene. Each of these exercises will be carried out in teams. Written reports and project materials will be due for each exercise.

Crime Scene Exercises 1-5 are worth 20 points each. The final CSE is worth 100 points. Reports will be graded using both administrative and technical criteria. Details of format and grading of the reports will be provided for each exercise. Grading in general includes the following considerations:

- Were all directions followed?
- Is the work presented neatly or sloppily?
- Are team members and team numbers all listed on the team report?
- Is the documentation complete?
- Are all questions answered?
- Do answers show thoughtfulness and a solid grasp of the material?
- Are the reports organized and well presented?
- Is the writing clear, legible, and understandable?
- Are all pages stapled together?
- Are data accurate?
- Does the data support statements and conclusions in the report?
- Are the statements within the report and between team members consistent? If not, are discrepancies explained?
- Is the detail provided sufficient and understandable for court?

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**A note about writing...**

Students have differing writing talents, abilities and skills. At the college level, you should be able to express yourself in writing clearly, concisely, and effectively, without grammar, punctuation or spelling errors. Any job you seek in this field will expect no less of you! The SJSU Writing Center (126 Clark Hall) provides free workshops and tutoring to help writers of all skill levels. Your writing assignments for this class will be graded for content as well as clear and correct expression, so please remember to:

- Spell check
- Proofread
- Be sure your answer fully addresses the question being asked
- Use proper APA citation format when necessary
Grading

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (2x25pts)</td>
<td>50 points</td>
</tr>
<tr>
<td>Homework (5x10pts)</td>
<td>50 points</td>
</tr>
<tr>
<td>CS Exercises (5x20pts)</td>
<td>100 points</td>
</tr>
<tr>
<td>Final CS Exercise</td>
<td>100 points</td>
</tr>
<tr>
<td>Midterm</td>
<td>100 points</td>
</tr>
<tr>
<td>Final exam</td>
<td>100 points</td>
</tr>
<tr>
<td>Total Possible</td>
<td>500 points</td>
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</tbody>
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Grades/Points

- A: 450-500
- B: 400-449
- C: 350-399
- D: 300-349
- F: <300

Extra Credit

Extra credit assignments will be announced in class and posted on the class website.

Make-ups

No late work will be accepted without prior approval from instructor. If you know ahead of time that you will miss a day when an assignment is due, either turn it in early, have a classmate turn it in for you, date stamp it in the JS office and put it in my box, or make other arrangements with me – prior to missing the class. Make up exams will generally not be given except under extraordinary, documented circumstances. Make-ups for the final will not be granted.

Class Participation

Class Participation is encouraged and expected. You will be evaluated based upon your contributions to the class. It is essential that you come prepared to participate so keep up with the reading and plan to speak up! Your participation or lack thereof can augment or diminish your overall grade in the class.

Tips for Success

Come to class, take good notes, do the readings, ask questions when you don’t understand, come to office hours for help, take advantage of extra credit, ask a friend to take notes for you if you can’t make it to class, participate in discussions, and study for quizzes and tests with a friend or in a group. That’s all you gotta do!

Instructor

Mary Juno holds a MS in Forensic Science from the University of Strathclyde (Glasgow, Scotland), and a BA in Forensic Anthropology (San Francisco State University). Juno has worked as a CSI at the Oakland Police Department since 2000, and has processed hundreds of major crime scenes. She has taught in the Oakland Police Academy and substituted at City College SF.
## JS112 Tentative Course Schedule (MON/WED)

### Week 1: Jan 28-30
- **Introduction to Crime Scene Investigation**
  - Read Ogle Chapter 1 & 2
- **Homework #1** Questions at end of Ch 1 due Feb 4

### Week 2: Feb 4-6
- **Crime Scene Initial Response, Searches**
  - Methods of Scene Documentation: Notes & Diagrams
  - Read Ogle Chapter 4
  - **CSE #1: Crime Scene Diagrams** due Feb 13

### Week 3: Feb 11-13
- **Methods of Crime Scene Documentation: Photo & Video**
  - Read Ogle Chapter 3,
    - [http://www.crime-scene-investigator.net/fet-ol.html](http://www.crime-scene-investigator.net/fet-ol.html)
    - [http://www.crime-scene-investigator.net/nighttime.html](http://www.crime-scene-investigator.net/nighttime.html)
    - [http://www.crime-scene-investigator.net/flashfill.html](http://www.crime-scene-investigator.net/flashfill.html)
  - **CSE #2: Photography** due Feb 20

### Week 4: Feb 18-20
- **Quiz #1**
- **Evidence Collection & Packaging**
  - Read [http://www.crime-scene-investigator.net/collect.html](http://www.crime-scene-investigator.net/collect.html)
- **Report Writing & Court Testimony**
  - Read Appendix I & II, p 342-350

### Week 5: Feb 25-27
- **Latent Fingerprints**
  - Read All FP handouts + Ch 17 in Reader, Ogle Chapter 5, FBI Latent Print Guide (posted on website)
  - **Homework #2** Do questions at end of Reader Ch 17 due Feb 25

### Week 6: March 3-5
- **Latent Fingerprints (cont)**
  - **CSE #3: Latent Fingerprints** due March 10

### Week 7: March 10-12
- **Questioned Documents / Trace Evidence**
  - Read Ogle Ch 6 & 11 + handouts in Reader
  - **Review for Midterm**

### Week 8: March 17-19
- **Midterm**
  - **Impression Evidence: Footwear, Tire Tracks, Toolmarks, Bitemarks**
  - Read Ogle Ch 9
Week 9: March 24-26
Spring Break: Relax, chill out, sleep late

Week 10: March 31-April 2
No class 3/31 (Cesar Chavez Day)
Impression Evidence: Footwear, Tire Tracks, Toolmarks, Bitemarks
CSE #4 (in class): Impressions
Homework #3 do questions at end of Ch 9 due April 2

Week 11: April 7-9
Firearms
Read Ogle Ch 8 + firearms handouts in Reader, + Ogle pgs 313-332
Blood & Blood Stain Pattern Analysis
Read Reader Appendix B & Glossary, + Ogle pgs 304-313
Homework #4 do questions at the end of Ch 8 due April 7

Week 12: April 14-16
Quiz #2
Blood & Blood Stain Pattern Analysis (cont)
In class CSE #5: Blood Stain Pattern Analysis due April 21

Week 13: April 21-23
Specific Types of Crimes: Arsons, Burglaries, Sexual Assaults
Read Ogle Ch 13 & 7, + pgs 128-132
Homework #5 do questions at the end of Ch 13 due April 21

Week 14: April 28-30
Specific Types of Crimes: Death Scenes
Read Ogle Ch 14 & 15
Homework #6 do questions at the end of Ch 15 due April 28

Week 15: May 5-7
Crime Scene Investigation
Re-visit Appendix 1, p 342-345
In class CSE #6: Mock Crime Scene due May 12
*Teams 1-4 on Monday / Teams 5-8 on Weds

Week 16: May 12
Legal & Ethical Issues
Review for Final

Week 17
Final
CSI Kit

For each person
- Ruler and protractor (with metric and inches)
- Graph paper (10 sheets)
- Permanent sharpie marker (black or blue)
- Pens (ball points) & pencils
- Scientific calculator

For each team
- Manilla envelopes (5x7, 8x10, coin envelopes ~5 of each)
- Clear packing tape
- 35mm camera with 3 rolls of film (24exp), or Digital Camera
- Q-tips (~10)
- Labels (white, adhesive)
- Paper bags (various sizes, including large grocery bags – 10 total)
- Plastic ziplock bags (various sizes – 10 total)
- Tweezers
- Scissors

I will provide
- Fingerprint brushes, powder, tape, cards, ink
- Blood
- Casting materials
- Latex gloves
- Masks
- Cleaning solutions
- Distilled water
- Evidence Paperwork
- Measuring tape
- Strollmeters