

Justice Studies Department
San Jose State University
Spring 2007
Class hours Friday 0900-1145
Room: MH 520

Instructor: Mary Juno
Office Hrs: Tues 12-1, Fri 12-1
Or set by appointment via email
Email: junos68@yahoo.com
Office: MH 521

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:

Crime Scene Investigation & Reconstruction. 2nd Edition. 2007. Robert R. Ogle, Jr. ISBN: 0-13-188607-X. Pearson Prentice Hall.

Criminalistics 112 Course Reader

Internet materials

Journal articles and other readings will be emailed to students as PDFs or will be made available on line. Citations and URLs for on line materials will be provided in assignments. The web sites we will use include the following:

- National Criminal Justice Reference Service:
<http://www.ncjrs.org/>
- Fingerprints: <http://www.fbi.gov/hq/cjisd/ident.htm>
- Crime Scene Investigation: <http://www.crime-scene-investigator.net/>
- CA Dept of Justice Physical Evidence Bulletins:
<http://www.cci.ca.gov/Reference/pehb/peb.html>

Supplementary Texts (Optional)

Course material may include citations from the following:

Forensic Science: An Introduction to Scientific and Investigative Techniques. 2nd Edition. 2005. Stuart H. James and Jon J. Nordby eds., ISBN: 0849327474. CRC Press

Police Photography, 5th Edition. 2006. Larry Miller. ISBN 1593452918. Anderson Publishing.

Interpretation of Bloodstain Evidence at Crime Scenes, 2nd Edition. 1999. Stuart H. James, William G. Eckert. ISBN: 0849381266. CRC Press.

POST Learning Domain 30, Preliminary Investigation, Version 3. 2006. California Commission on Peace Officer Standards & Training (POST).
<http://www.post.ca.gov>

Processing Guide for Developing Latent Prints. 2000. Federal Bureau of Investigation.

Criminalistics: An Introduction to Forensic Science (College Version), 8th Ed. 2004. Saferstein, Ph.D., ISBN: 0-13-111852-8, Prentice Hall.

Course Format

The course will include lectures by the instructor, guest lectures, powerpoint presentations, films, and hands-on group exercises. Texts will be supplemented with online readings and handouts. *I strongly recommend that you do the assigned readings the week **before** we are to cover the topic.*

Course Requirements

Exams: 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, short answer, diagrams, drawings and sketches, short essay and/or long essay. There are no scantron exams in this class.

Midterm Friday March 16
Final

Quizzes: Quizzes on assigned readings, lectures, group activities and other assigned materials will be given during the semester. These will be in the same format as the midterm and final -- multiple choice, matching, true/false and short answer essay questions.

Homework: Homework in the form of questions or short papers based on readings will be assigned throughout the term. Turned in homework **MUST** be in hardcopy format - not emailed.

Crime Scene Reports: There will be 5 crime scene exercises during the semester. These will include scene diagrams, latent fingerprints, footwear impression casts, blood stain pattern 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.

CSI Exercise reports 1-4 are worth 25 points each. The final CSI exercise report is worth 100 points and will include a team presentation. 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:

- **Administrative Criteria**
 - o Were all directions followed?
 - o Is the work presented neatly or sloppily?
 - o Are team members all listed on the team report, as well as team numbers?
 - o Is the documentation complete?
 - o Are all questions answered?
 - o Are the reports organized and well presented?
 - o Is the writing clear and legible?
 - o Are all pages stapled together, or bound in a notebook?

- **Technical and Scientific Criteria**
 - o Are data accurate?
 - o Does the data support statements and conclusions in the report?
 - o Are the statements within the report and between team members consistent? If not, are discrepancies explained?
 - o Is the detail provided sufficient and understandable for court?

- o Would the CSI be able to reconstruct the crime scene years from now, based on the documentation?

General Writing Requirements: 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! 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

Quizzes (3x20pts)	60 points
Homework (4x10pts)	40 points
CSI Exercises (4x25pts)	100 points
Final CSI Exercise	100 points
Midterm	100 points
<u>Final exam</u>	<u>100 points</u>
Total required	500 points

Extra Credit

An extra credit writing assignment may be offered worth up to 15 points.

Make-ups

Make-up tests will not generally be permitted. If you miss a quiz because you are sick, you must bring me a doctor's note to retake the quiz. If you miss the midterm and have proper documentation for your absence, I may assign a 15 page double-spaced term paper to substitute. There will be NO MAKE UP for the final. *CSE's cannot be made up.*

GRADES/POINTS					
	From	To			
			C+	383.5	399.9
A+	483.5	500	C	367	383.4
A	467	483.4	C-	350	366.9
A-	450	466.9	D+	333.5	349.9
B+	433.5	449.9	D+	317	333.4
B	417	433.4	D-	300	316.9
B-	400	416.9	F	<300	

Instructor

Mary Juno holds an MS in Forensic Science from the University of Strathclyde in Glasgow, Scotland, and a BA in Forensic Anthropology from 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 teaches in the Oakland Police Academy, substitute teaches at City College SF, and serves as adjunct faculty at National University. A PhD is in the works.

Course Add/Drop Statement

Instructors are permitted to drop students who fail to attend the first scheduled class meeting and who fail to inform the instructor prior to

the second class meeting of the reason for any absence and their intention to continue in the class. Some instructors will drop students who do not meet the stated course prerequisites. However, instructors are not required to drop a student from their course. ***It is the student's responsibility to make sure classes are dropped.*** You, the student, are responsible for understanding the policies and procedures about add/drops, academic renewal, withdrawal, etc. found at: http://sa.sjsu.edu/student_conduct

Academic Integrity Statement

Academic integrity is essential to the mission of San José State University. As such, students are expected to perform their own work (except when collaboration is expressly permitted by the course instructor) without the use of any outside resources. Students are not permitted to use old tests, quizzes when preparing for exams, nor may they consult with students who have already taken the exam. When practiced, academic integrity ensures that all students are fairly graded. Violations to the Academic Integrity Policy undermine the educational process and will not be tolerated. It also demonstrates a lack of respect for oneself, fellow students and the course instructor and can ruin the university's reputation and the value of the degrees it offers. We all share the obligation to maintain an environment which practices academic integrity. Violators of the Academic Integrity Policy will be subject to failing this course and being reported to the Office of Student Conduct & Ethical Development for disciplinary action which could result in suspension or expulsion from San José State University. The policy on academic integrity can be found at: http://sa.sjsu.edu/student_conduct

To better understand plagiarism and to aid you in making sure that you are not plagiarizing, please see me and/or visit:

<http://tutorials.sjlibrary.org/plagiarism/index.htm>

American with Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires students with disabilities requesting accommodations must register with DRC to establish a record of their disability.

Justice Studies Department

Course Schedule (subject to change)

Dates Topics

Week 1: Jan 26

Introduction to Crime Scene Investigation

Syllabus, reading materials, course format & description

Introductions: your background, my background.

Form crime scene teams. Swap emails/phone numbers.

Topics

- Goals of crime scene investigation
- Qualities of a CSI
- Required equipment
- Types of Evidence (3)
- Nature and value of physical evidence
- Relationships & context of evidence - deciding what is important at a scene and what is not
- Linkage Triangle/Edmund Locard
- Importance of quality reports

Assignments

Sign in -- send me an email with subject heading "JS112".

Read Ogle Ch 1, Reader Ch 10

Read <http://www.ncjrs.gov/pdffiles1/nij/200160.pdf>

Homework #1 Questions at end of Ch 10 in Reader **due Feb 2**

Week 2: Feb 2

Crime Scene Initial Response, Searches

Methods of Scene Documentation: Notes & Diagrams

Topics

- Initial Response: Securing the scene
- Locating & identifying physical evidence
- Fragile evidence & its protection
- Initial observations
- Sources of information at the scene
- Surveys/walk-throughs/systematic searches
- Note-taking → Reports
- Sketches → Diagrams

Assignments

Read Ogle Chapter 2 & 4

Meet with team members, complete CSE #1

Crime Scene Exercise 1 due Feb 9

Week 3: Feb 9

Methods of Crime Scene Documentation: Photo & Video

Quiz #1

Topics

- Photo & Video
- Writing with light
- 35mm camera & crime scene photography (PPT)
- Video recording
- Orientation/midrange/close up photos
- Flash photography
- Painting with light
- Digital cameras/issues

Assignments

Read Ogle Chapter 3, Reader Ch 10 p174-177

Week 4: Feb 16

Forensic Evidence

Topics

- Identification and individualization
- Class & individual characteristics of evidence
- Physical fit/matching
- Handling & packaging evidence
- Controls/standards
- Chain of custody
- The Scientific Method

Assignments

Read Ogle Ch 1, Reader Ch 12 & 33

Homework #2 Do questions at end of Ch 33 in Reader **due Feb 23**

Week 5: Feb 23

Latent Fingerprints

Topics

- History of Fingerprints
- Basis for Identification
- Will West case
- Types of prints
- Pattern types
- Where to look for fingerprints at a scene
- Surface considerations
- Processing techniques (field vs lab)
- Taking elimination prints
- Quality of latent lifts
- How an identification is made
- Automated FP systems -- CAL ID/ALPS

Assignments

Read All FP handouts + Ch 17 in Reader, Ogle Chapter 5

Homework #3 Do questions at end of Ch 17 in Reader **due March 2**

Download/Read PDF: FBI Latent Print Guide (email from instructor)

Week 6: March 2

Continuation of Latent Fingerprints

In-class CSE #2: Latent Fingerprints, due March 9

Quiz #2

Week 7: March 9

Questioned Documents / Trace Evidence

Topics

- QD defined
- Theory of Handwriting
- Collection of Writing Standards
- Signatures
- Typewriters, Printers, Photocopiers
- Examination & Comparisons of QD
- Paint
- Soil
- Hairs & Fibers
- Glass

Assignments

Read Ogle Ch 6 & 11, Reader Ch 16 & 21 + handouts
Study for Midterm!

Week 8: March 16

Juno will be away this week.

Midterm

Week 9: March 23

Impression Evidence: Footwear, Tire Tracks, Toolmarks, Bitemarks

In class CSE #3: Footwear Casts due end of class period.

Topics

- Value of Impression Evidence
- Different types of impression evidence
- Documentation -- photography, casting
- Comparisons (like with like)
- Casting footwear & toolmarks

Assignments

Read Ogle Ch 9, Reader Ch 18 & 19

Homework #3 Do questions at end of Ch 9 & 18 **due April 6**

Week 10: March 30

Spring Break

Assignments

Relax, take a breather, chill out, sleep late.

Week 11: April 6

Firearms

Blood & Blood Stain Pattern Analysis

Topics

- Characteristics & nomenclature of firearms
- Ammunition and firearms evidence
- Gunshot residue analysis
- Collection & handling of firearms evidence
- Firearm Evidence Comparisons

- Blood Safety Precautions
- Presumptive tests for blood
- Recording of bloodstains
- Collection & preservation of blood/bloody clothing

Assignments

Read Ogle Ch 8, Reader Ch 20 & 11, Appendix B & Glossary
Homework #4 do questions at the end of Ch 8 **due April 13**

Week 12 April 13

Continuation of Blood & Blood Stain Pattern Analysis

In class CSE #4: Blood Stain Pattern Analysis due April 20

Topics

- Objectives of BPA
- Blood stain pattern analysis (PPT)

Assignments

Read Ogle Ch 7 p134-149, Reader Ch 11, Appendix B & Glossary

Week 13 April 20

**Specific Types of Crimes: Arsons
Burglaries
Sexual Assaults**

Topics

- Objectives of arson investigation
- Challenges & difficulties
- Collection & preservation of physical evidence
- Origin & cause analysis
- Incendiary devices
- Explosives/Bomb scene investigation

- Three kinds of burglars
- Point & method of entry
- Thinking like a burglar
- Types of evidence encountered at burglaries

- Interviewing the victim
- Medical exams

- Collection of evidence
- Biological evidence

Assignments

Read Ogle Ch 13, Reader Ch 24

Homework #5 do questions at the end of Reader Ch 24 **due April 27**

Week 14 April 27

Specific Types of Crimes: Death Scenes

Topics

- Deaths: natural, accidental, intentional
- Suicides: what to look for
- Murder
- Luci Houston case
- Signs of struggle
- Autopsy findings

Assignments

Read Ogle Ch 14 & 15, Reader Ch 4

Week 15 May 4

Crime Scene Investigation

In class CSE #5: Mock Crime Scene due May 11

Week 16 May 11

Legal & Ethical Issues

Topics

- The CSI effect
- Ethics
- Report Writing
- Court testimony
- The Scientific Method

Assignments

Read Ogle Appendix I & II, Reader Ch 1 & 32

Review for Final

Week 17 May 18

Final

CSI Kit

For each person

- Bound notebook with page numbers
- Ruler and protractor (with metric and inches)
- Graph paper (10 sheets)
- Permanent sharpie marker (black or blue)
- Pens (ball points) & pencils

For each team

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

I will provide

- Fingerprint brushes, powder, tape, cards, ink
- Blood
- Casting materials
- Latex gloves
- Masks
- Alcohol wipes
- Cleaning solutions
- Distilled water
- Evidence Paperwork