

San José State University
Department of Justice Studies
FS 11 Survey of Forensic Science*, Course number
29206, Spring 2016

Instructor	Dr. Steven B. Lee
Office Location	On line and MH 509: For appointments set by email
Instructor Email	sblee999@gmail.com , steven.lee@sjsu.edu
Office Hours	Wednesdays 1630-1730 on line- Set by appointment via email Note 1) Post questions re the class to the Discussion Board under “HELPME”, or 2) Email me private questions.
Canvas Website	https://sjsu.instructure.com/ Login with SJSU Tower ID and Password → → Courses → → FS 11
Class Days/Time	On line- Course will be open starting first Weds of classes- 2/3/16
Prerequisites	None
FS Library Liaison	Silke Higgins silke.higgins@sjsu.edu
FS Lib Guide	http://libguides.sjsu.edu/content.php?pid=57768&sid=2450175

Course Description

This survey course introduces students to the profession of forensic science. Topics include the history and sub-disciplines of forensic science, and the scientific methods and analytical instrumentation used for the recognition, documentation, collection, preservation, and analysis of physical evidence.

Note: This course is required for FS majors and FS minors. Recommended for JS majors, and any student with a general interest in Forensic Science.

Course Goals and Student Learning Objectives

Upon successful completion of this course, students will be able to:

- LO1** Understand the roles of forensic and investigative personnel, their separate duties and how they work together.
- LO2** Articulate a realistic perspective of the field of forensic science, the nature of the work, its limits, challenges, and successes.
- LO3** Define important terms, concepts and principles such as: “CSI Effect”, 4th Amendment, chain of custody, scientific method, pattern evidence, identification evidence, individualized evidence, class and individual characteristics, probative value, and the Locard Exchange Principle.
- LO4** Demonstrate understanding of genetic principles such as inheritance, DNA, STRs, alleles, genotype, phenotype, and PCR. Explain the history of DNA profiling.
- LO5** Display foundational knowledge in the history of forensic science, the structure and organization of crime labs, the analytical processes and procedures used, the sub-disciplines and contributing sciences of forensic science, and the types of evidence encountered.

Required Texts/Readings

James, S., Nordby, J., & Bell, S. (2014). *Forensic Science: An Introduction to Scientific and Investigative Techniques, 4/E*. Boca Raton, FL: CRC Press/Taylor & Francis ISBN-13: 978-1439853832- this book is also required for FS 162. Keep it if you plan to continue in FS.

Many additional readings, tutorials, videos, and links will be posted on Canvas.

*A significant portion of this FS 11 course was provided by Professor Mary Juno and incorporated with her permission.

Assignments

1. Quizzes (75%): There will be five non-cumulative quizzes in this class (one for each module). Format will include multiple choice, matching, true/false, and short answer. (LO1-5)
2. Chapter Review Questions/Worksheets (10%): Chapter review questions can be found at the end of each chapter. Upload your responses to the first 10 questions for each chapter to Canvas by the due date. Worksheets on videos, or other topics may also be distributed. (LO1-5)
3. Discussion Board (15%): Access the DB through the links on the left side menu on Canvas. The purpose of the discussion board is to discuss concepts, ideas, techniques, etc. Some discussion questions will be based on required readings or videos. For every discussion question, students must post one substantive response to the question, and one substantive response to a classmate's post. A substantive post is one that is meaningful and specific, and moves the conversation forward. A non-substantive post is one that is vague, simply repeats or restates what someone else has already said, or just agrees with or compliments someone else ("I like the way you said that!" for example, is not substantive). No credit will be given for non-substantive posts. (LO1-5)

Important Discussion Board Directions

- 1) Each week there are discussion board posts that are due- see schedule below
- 2) For posting to the discussion board, you will be working in 4 teams of approximately 12-14 students.
- 3) Each team will be assigned to specific weeks to respond (3 per team).
- 4) **Your assigned team and names of each team (Red, Orange, Yellow and Blue) along with the discussion board dates for which you are responsible are listed below.**
- 5) **Every member of the team is responsible for uploading substantive comments on the discussion board for the week their team is assigned.**
- 6) All students should read the discussion questions regardless of whether or not your team is assigned to responding for that week.

The Red team discussion due dates- 2/7, 3/6 and 4/3. The Orange team -2/14, 3/13 and 4/10. The Yellow team- 2/21, 3/20 and 4/17 and The Blue team 2/28, 3/26 and 4/24.

7-Feb	Red
14-Feb	Orange
21-Feb	Yellow
28-Feb	Blue
6-Mar	Red
13-Mar	Orange
20-Mar	Yellow
26-Mar	Blue
3-Apr	Red
10-Apr	Orange
17-Apr	Yellow
24-Apr	Blue

Team assignments can be found below:

RED		ORANGE		YELLOW		BLUE	
Abarca, Lorena Silva		Fiel, Casey Alexandra Bolasco		Moran, Paloma Teresa		Solorsano, Jorge Luis	
Alexander, Jasmin Tatiana		Guerrero, Peter		Moyrong, Leo Valentino		Steele, Ashley Lynn	
Alhayek, Nassreen		Guevara Monares, Kassandra		Munoz Yepez, Dulce Maria		Strabinick I, Jay Alexander	
Arce, Yesenia Yuriria		Hernandez, Jose De Jesus		Noguera, Jade Marie		Tam, Elain Le Yan	
Banejad, Mateen Allen		Hernandez, Maria Cristina		Pagdilao, Justin Ratuuta		Tatum III, Willie Julian	
Barnwell, Sierra Dawn		Hernandez, Patricia Marie		Parreno, Jhaid Jairah Teves		Tovar Ortiz, Deisy	
Barrios, Amilcar		Hernandez, Veronica Michelle		Patino, Sabrina Anissa		Valentine, Kim Ann	
Basiel, Brittany Nicole		Jernigan, Brittany Karine		Pertessis, George Emil		Vargas, Kristha Jocelyn	
Castro, Consuelo		Jorgenson, Amanda Marie		Pham, Brandon Duy		Velosa, Jordan Debra	
Chan, Ronnie Chunkit		Kwong, Leica		Polovinko, Volha		Villarreal, Gabriel Louis	
Craig, Christopher Ryan		Loza, Jose Luis		Saldivar, Mayde		Villela, Ana Karina	
Devries, Ian Michael		Mai, David		Sanchez, Miriam Josephine		Vo, Dustin Gutierrez	
Duffel, Dante Whelmon		Martinez, Monica		Simental, Michael David		Wong, Steven Peter	
Echeverria Crisol, Jose Enrique		Martinez, Roberto Carlos		Snyder V, Charles Belden			

Extra Credit Opportunities

Extra credit opportunities may be available throughout the semester and will be used to augment your final grade up to 3% (1% each).

1. Join a professional organization (CAC, AAFS, IAI, *etc.*) that is of specific interest to *you* and supply proof of membership before the end of the semester. Note: a professional organization is one that holds conferences and/or produces a periodic journal. This is not the same thing as an internship, job, or student organization; it is a professional *membership*.
2. Attend a Forensic Science or Justice Studies seminar (Forensic Science Seminar Series or Ann Lucas Lecture Series) and write a two-page, double-spaced, typewritten paper that includes a synopsis of the seminar/lecture and your reaction/response. Your paper is due within one week of the tour.
3. Complete the short course offered by the National Institute of Justice marked “extra credit” during the Forensic Bio module and submit your certificate of completion by the end of that module.

Late Work and Make Ups

Real life has deadlines and so do college classes. With this in mind, manage your time responsibly with the knowledge that late work will generally not be accepted,

If you know ahead of time that you will be offline when an assignment is due, complete it early.

Make-ups will generally not be given unless extraordinary, documented circumstances exist.

Certainly, if you have a genuine problem, contact me and I will gladly help you. If you are in any doubt about the requirements of an assignment, or due dates/times, please re-read the assignment and/or schedule. If your question is still unanswered, contact me for clarification.

Grading Scale for All Assignments

A+	97-100	B+	87-89.9	C+	77-79.9	D+	67-69.9
A	94-96.9	B	84-86.9	C	74-76.9	D	64-66.9
A-	90-93.9	B-	80-83.9	C-	70-73.9	D-	60-63.9
						F	<60

All assignments are graded based on adherence to directions, thoroughness, thoughtfulness, clarity, and logic. Note: A grade of C or better is required for all Justice Studies and Forensic Science major and minor coursework.

Course Delivery

This course is delivered online through Canvas. You will need a computer with reliable internet access. Success in the course requires active participation by logging in *daily* for updates, to complete assignments, and to receive important and timely messages. Canvas login:

<http://www.sjsu.edu/at/ec/canvas/>

Canvas Student Guide and Resources:

http://www.sjsu.edu/at/ec/canvas/student_resources/index.html

What Makes a Successful Online Student?

<http://www.ion.uillinois.edu/resources/tutorials/pedagogy/studentprofile.asp>

Netiquette:

Please visit the following site for communication rules and guidelines that we will follow in our course: <http://online.uwc.edu/technology/onletiquette.asp>

Course Schedule

Due dates for assignments, discussion board posts, quizzes, etc., can all be found on the Canvas course website. Assignments and posts are due every week, on Sundays at midnight. Exams for each module will be open for one day only, 8am-midnight, on the Wednesday of the module. There is one exam for each module – no cumulative final.

On line Quizzes

1/28-2/17	Module 1: Introduction to FS & CSI	Quiz 1: 2/17
2/24-03/25	Module 2: Forensic Biology	Quiz 2: 3/23
3/30-04/13	Module 3: Forensic Chemistry	Quiz 3: 4/13
04/20-05/04	Module 4: Pattern Evidence	Quiz 4: 05/04
05/04-05/11	Module 5: Error, Science, and the Future of FS	Quiz 5: 05/11

Tips for Success in This Course

- 1) Online classes are self-motivated, so it is up to you to keep up with the reading and posting. Set aside a certain time every day to login to the class website and participate. Don't let yourself fall behind. Post early to the DB, and check back in to the discussion throughout the week.
- 2) Create a folder on your browser toolbar titled "FS 11". Bookmark all the sites you visit during the class and keep them in that folder. That way, you'll have quick access to them when you revisit a topic or study for an exam.
- 3) If you have a question regarding course material or requirements, post it on the class site under the Discussion Board topic "HELPM.E." If you have a private problem or issue, email me. Don't wait until it's too late to do anything about it!
- 4) Join the FSS. If you are a Forensic Science major or minor, this group will provide you with an instant network of peers, friends, and mentors. Even if you're not an FS major, you will have a great time with this group.

Student Resources

Forensic Science Student Group (FSS)

Forensic Science Students is a campus group open to all students interested in forensic science. The group meets biweekly during the semester and offers friendship, forensic science-related activities, networking opportunities, and mentorship. Members of the FSS participate and assist at conferences, CSI camps, guest speaking events, and other extra-curricular activities. FSS Peer Mentors assist forensic science students in navigating the major, understanding requirements and prerequisites, and making wise choices in their college careers. Mentors may also offer limited tutoring, and facilitate educational and professional opportunities. Contact sjsu.fss@gmail.com for more information, or to get an application for membership.

CASA Student Success Center

The Student Success Center, located in MacQuarrie Hall 533, provides GE advising for undergraduate students majoring or interested in majoring in programs offered by CASA Departments. The Student Success Center provides also assistance with changing majors, answers to academic policy related questions, meetings with peer advisors and/or various regularly scheduled presentations and workshops. Students are welcome to study in the CASA Center during open hours. <http://www.sjsu.edu/casa/ssc/>

University Help Desk is the first point of contact for service and support to help you with password resets, login issues, email support and account requests. University Help Desk is located in Clark Hall, Room 102. Phone: 408.924.2377 Email: help@help.sjsu.edu Hours: Mon – Thur 8am - 9:45pm, Fri 8:00am – 4:45pm <http://www.sjsu.edu/helpdesk/>

A.S. Computer Services Center has a computer lab with 100 computers that provided most major operating systems available from recently released versions of Microsoft Windows, to Linux, and Macintosh. Located in the Student Union on the 3rd floor. Phone: 408.924.6976 Hours: Mon - Thurs 8:00am – 10:00pm; Fri 9:00am - 5:00pm <http://as.sjsu.edu/asccsc/index.jsp>

Student Technology Resources

Computer labs for student use are available in the Academic Success Center located on the 1st floor of Clark Hall and on the 2nd floor of the Student Union. Additional computer labs may be available in your department/college. Computers are also available in the Martin Luther King Library. A wide variety of audio-visual equipment is available for student checkout from Media Services located in IRC 112. These items include digital and VHS camcorders, VHS and Beta video players, 16 mm, slide, overhead, DVD, CD, and audiotape players, sound systems, wireless microphones, projection screens and monitors.

Learning Assistance Resource Center

The Learning Assistance Resource Center (LARC) located in Room 600 in the Student Services Center assists students in the development of their full academic potential and motivates them to become self-directed learners. The center provides support services, such as skill assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. <http://www.sjsu.edu/larc/>

SJSU Writing Center

The SJSU Writing Center located in Room 126 in Clark Hall offers a variety of resources to help students become better writers, including one-on-one tutoring sessions and numerous writing workshops. All services are free for SJSU students. <http://www.sjsu.edu/writingcenter/>

University Policies

Academic Integrity

Academic integrity is essential to the mission of San José State University. 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 demonstrate a lack of respect for oneself, one's fellow students and the course instructor. Violations also can ruin the university's reputation and devalue of the degrees it offers. We all share the obligation to maintain an environment that practices academic integrity.

The University's Academic Integrity Policy is available at http://www.sa.sjsu.edu/download/judicial_affairs/Academic_Integrity_Policy_S07-2.pdf. Your own commitment to learning, as evidenced by your enrollment at San Jose State University, requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The website for Student Conduct and Ethical Development is http://www.sa.sjsu.edu/judicial_affairs/index.html.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person's ideas without giving proper credit) will result in a failing grade in the course and will be subject to sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include in your assignment any material you have submitted, or plan to submit for another class, please note that SJSU's Academic Policy F06-1 requires approval of instructors.

Credit Hour Policy

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of forty- five hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

Dropping and Adding

Students are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. Information on add/drops is available at <http://info.sjsu.edu/web-dbgen/narr/soc-fall/rec-298.html>. Information on late drops is available at <http://www.sjsu.edu/sac/advising/latedrops/policy/>

Students should be aware of the current deadlines and penalties for adding and dropping classes.

Important Dates This Semester

<http://www.sjsu.edu/registrar/calendar/2162/index.html>

Campus Policy in Compliance with the American Disabilities Act

The Accessible Education Center (<http://www.aec.sjsu.edu/>) provides resources for students with disabilities. Resources include: Academic Accommodation, Academic Advising, Adaptive Technology Center, Alternative Media Center, Deaf & Hard of Hearing Program, Disabled Parking, Guidelines for Documentation of Disability, Educational Assistants, Learning Disabilities, and Priority Registration. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the AEC to establish a record of their disability. If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please see me during office hours.

AEC: Administration Building 110

Phone: 408.924.6000 (Main Office)408.924.6542 (Deaf and HoH)408.808.2123 (ATC)

Hours: Mon - Thurs, 9:00am to 6:00pm; Friday 10:00 am to 4:00 pm

Instructor

Professor Lee holds an a BS from SUNY Binghamton in Biology, MS from NYU and PhD from University of California, Berkeley in Molecular Biology. Lee holds several concurrent positions including consulting positions for several biotech companies, Visiting Scholar at UC Berkeley, and an adjunct professor appointment in Chemistry at Florida International University and in Biological Sciences at San Francisco State University. He was formerly the Director of R&D at CA Dept of Justice DNA Laboratory from 1994-2000 where he served as an expert witness in DNA, directed the development, validation and implementation of new technologies and, conducted DNA training courses. He is a full member of the American Association for the Advancement of Science, the California Association of Criminalists, a Fellow of the Criminalistics Division of the American Academy of Forensic Sciences, , and is an American Society of Crime Laboratory Directors Laboratory Accreditation Board certified inspector. He also served on the FBI Technical Working Group on DNA Analysis Methods group from 1994-2000. He has taught courses in molecular biology at SFSU (1996-1998), Forensic genetics at UC Davis (1997), and most recently forensic DNA Typing of STRs at FIU (2003).