Mode of Instruction

This course is offered **asynchronously**. In other words, there is no scheduled classroom or online video conferencing for which this course is designated to take place on a designated day(s) at an elected time(s) (see SJSU <u>Instruction Modes</u>). **NOTE**: In the event that there is a federal/state mandate for the CSU to return to sheltering-in-place, this course will switch to using the video conference application, **Zoom**. Practical sessions will continue to take place remotely.

Technology Requirements

(In the event that there is a call to a revert to online synchronous modality)

Students are required to have an electronic device (laptop, desktop or tablet) with a camera and built-in microphone. SJSU has a free <u>equipment loan program</u> available for students.

Students are responsible for ensuring that they have access to reliable Wi-Fi during class. If students are unable to have reliable Wi-Fi, they must inform the instructor, as soon as possible to determine an alternative. See the <u>SJSU Learn Anywhere</u> website for current Wi-Fi options on campus.

Zoom or Other Teleconferencing Platforms Protocol

Use of Camera Remotely

Students are encouraged to turn their cameras on during group activities/discussion (<u>not</u> a requirement) to foster a sense of community, increase focus, remain engaged and maintain accountability. To test your video click on this Zoom Help Center link, <u>Testing Your Video</u>.

Choose a Virtual Background

your background (for privacy or personal flare). You may also choose to <u>customize your Zoom Profile</u> by adding a personal picture or an Avatar (i.e. Mirror: Cartoon Avatars & Stickers for Zoom, Loomie, Loomie 3D Avatars, etc.) to your Zoom profile as fun, creative and memorable way to display your person or interests. See *Zoom Classroom Etiquette* below for more details.

Zoom Classroom Etiquette

Mute Your Microphone: To help keep background noise to a minimum, make sure you mute your microphone when you are not speaking.

Be Mindful of Background Noise and Distractions

class, to the greatest extent possible.

- o Avoid video setups where people may be walking behind you, people talking/making noise, etc.
- o Avoid activities that could create additional noise, such as shuffling papers, listening to music in the background, etc.

Position Your Camera Properly (if using): Be sure your webcam is in a stable position and focused at eye level.

- **LO4** Summarize the history of DNA profiling, principles of genetics concerning DNA, Mendelian inheritance, STRs, alleles, genotypic and phenotypic expressions of genes, and PCR.
- **LO5** Apply the concepts and principles of the scientific method to simulated forensic laboratory practicals, by formulating hypotheses, analyzing data collected, critically assessing the results and arriving at conclusions.
- **LO6** Communicate an accurate representation of forensic science, the methods employed in various contexts, limitations of the field, the challenges faced and its achievements.

Required Texts/Readings

Bell, S. (2019). Forensic Science: An Introduction to Scientific and Investigative Techniques, 5/E. CRC Press/Taylor & Francis. ISBN-13: 978-1-138-04812-6

NOTE:

- This textbook is <u>FREELY available</u> in e-format on the SJSU library webpage.
- o This textbook also serves as required reading for FS 162.

Additional required readings, tutorials, videos, and links will be posted on Canvas.

Assignments

- 1. *Exams* (40%): There will be two exams 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 (Group and/or individual), and Case Project & Presentation (20%): Chapter review questions can be found at the end of each chapter. Upload your responses to Canvas by the due date. Worksheets on videos, or other topics may also be distributed. (LO1-5). Each student will create and upload a PowerPoint Presentation on one criminal case in which forensic evidence played a critical role. Additional assignment details will be posted on Canvas. (LO1-3, 5, and 6)
- 3. *Individual and Group Labs* (30%): The purpose of performing laboratory experiments is to put into practice, and gain an understanding of, the principles that govern the scientific approach. Generally speaking, the scientific method is a series of steps that are followed in order to execute well-thought-out, and methodical investigations of various phenomena as they occur in the natural world. A question is asked about a particular circumstance or event, for which it is subjected to rigorous testing to generate a conclusion. (LO1, LO2, LO5, and LO6)
- 4. *Participation and Peer Reviews* (10%): Students are responsible for taking charge of their learning and personal development. As part of the online learning process, they will be required to make thoughtful and meaningful contributions to online group activities and discussion boards. Students will be assessed on their abilities to actively and skilfully conceptualize various theories and principles as they relate to forensic science

Class Protocol and Policies

All assignments are to be completed by their designated due dates. Late work MAY NOT be submitted. Assignments submitted thereafter will NOT be accepted and results in an automatic fail unless extraordinary, documented circumstances exist or a is presented. AVOID MISSING PRACTICAL assignments! Make-up sessions may not be available. Should you know in advance of any extenuating circumstances that conflict with such sessions, it is your responsibility to inform your lecturer. The possibility for submitting an alternative assignment may be granted at discretion, but be advised that such undertaking will be quite demanding. If there is any doubt about the requirements for an assignment, or due dates/times, re-read the directions of the assignment and/or schedule. If your question(s) remains unanswered, contact your instructor for clarification.

Class participation is expected. It is essential that you are prepared to complete all assigned work. Therefore, it is your responsibility to stay on top of your readings, complete assignments on time, and participate in online class discussions, activities and remote lab practicals. Lack of adequate participation *will* result in pop quizzes, which *will* count toward your final grade.

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 sign.fss@gmail.com for more information, or to get an application for membership.

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 (see Student Computing Services and equipment available on hand). 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

Equipment Loaning page).

May 17-23: Final Exams (see Exam Schedule)

*Late add fees apply. See above website for more details.

Justice Studies Reading and Writing Philosophy

The Department of Justice Studies is committed to scholarly excellence. Therefore, the Department promotes academic, critical, and creative engagement with language (i.e., reading and writing) throughout its curriculum. A sustained and intensive exploration of language prepares students to think critically and to act meaningfully in interrelated areas of their lives personal, professional, economic, social, political, ethical, and cultural. Graduates of the Department of Justice Studies leave San José State University prepared to enter a range of careers and for advanced study in a variety of fields; they are prepared to more effectively identify and ameliorate injustice in their personal, professional and civic lives. Indeed, the impact of literacy is evident not only within the span of a specific course, semester, or academic program but also over the span of a lifetime.

Course Instructor

Dr. Shawna Bolton first attended the University of Toronto where she obtained her BA in Anthropology (major) and double minored in French and English. She then went on to complete an MSc in Criminal Justice with an advanced forensic anthropology interdiscipline at Radford University before earning her PhD in Forensic Sciences at the University of Wolverhampton in the UK. There, Dr. Bolton conducted preliminary research investigating the post mortem molecular properties of cartilage and its potential use as a forensic tool. Upon the completion of her doctorate, she has worked in partnership with Global Forensics and the University of Wolverhampton to prepare and provide academic and laboratory training to Rwandan National Police officers enrolled in an intensive forensic DNA and toxicology module. To date, she is teaching FS courses while providing students with fieldwork and laboratory internship experience through her on-going research involving cartilage degradation.

Tentative Course Schedule

*Important Dates - If ahead of

schedule, further lectures may include topics such as underwater investigations, behavioral forensic science, and forensic nursing.

Role of Forensic Science at the Crime Scene & Physical Evidence

3 02/06 & 02/08

17	05/15	Underwater Investigations Forensic Behavioral Science	TBA, 21
		Topics in FS - Expert Witness Testimony/ Bias/ Laboratory Accreditation/ Error & Future of FS; Final Exam Review	TBA
Final Exam	(5:15p- 7:30p)	Final – Non-Cumulative Exam (Theory and Practical) Refer to link below for exam dates and times. https://www.sjsu.edu/classes/final-exam-schedule/spring-2023.php	6, 7, 10-15, 21