Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring
Year: 2025
Course Prefix: CJ
Course and Section #: 1350-X03
Course Title: Introduction to Forensic Science
Credits: 3

Course Description

Studies Forensic Science and multiple forensic disciplines as they correlate with criminal investigations. Teaches the identification and importance of multiple types of physical evidence typically found at a crime scene and how that evidence is used to provide a link between the victim, suspect, and crime scene. Explains the proper techniques needed to document a crime scene and physical evidence. Provides the process of taking the evidence from the scene and the scientific analysis of the evidence, which is completed at the crime laboratory.

Course Attributes

This course has the following attributes:

☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☒ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program
☐ Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Dr. Elizabeth Chesna

Student Learning Outcomes

1. Discuss the historical aspects of forensic science and how they have evolved into current forensic practices.
2. Identify the various types of physical evidence typically found at a crime scene.
3. Explain the principles of crime scene documentation.
4. Explain the role of science as applied to criminal investigations.
5. Indicate proper collection and scientific analysis for various types of physical evidence collected at a crime scene.

Course Materials and Texts

Access to Canvas
Forensic Science: From the Crime Scene to the Crime Lab, 4th edition by Richard Saferstein, Prentice Hall 2019

Course Requirements

Course Assignments, Assessments, and Grading Policy

Assignments (30% of overall grade): Assignments consist of hands-on application of concepts whenever practical. Students will have specific assignments each week that relate directly to the field of forensics being discussed that week.

Discussions (15% of overall grade): Discussions will consist of answering prompts or summarizing and discussing research with other students. Discussions will be opportunities to explore topics together. Posts to the discussion should add significantly to the conversation and support your point of view. *Comments that do not add significantly to a discussion will receive* ***no credit****.*

Quizzes (25% of overall grade): There are chapter quizzes for every lesson consisting of multiple choice, matching, and true / false questions. Quiz content may come from any assignment in the module, including readings.

Exams (20% of overall grade): There will be a comprehensive final examination for this course. This exam will be closed-book and administered through Proctorio.

Expert Testimony Evaluation (10% of overall grade): Students will watch and critique video of actual experts testifying in court. Videos will be selected by the student via open access platforms, such as YouTube. Students will write a written evaluation of the testimony bu providing an evaluation of the forensic evidence provided, objections from the defense, and facts of the case. Students will pthen post a video of themselves reflecting on their perception of this witness if they were a juror in the selected case.

No late work is accepted – Canvas submissions close at the indicated due date, no work may be submitted after the deadlines.

Final grades are not rounded and assigned the corresponding letter grade: (A) 94-100%; (A-) <94-90%; (B+) <90-87%; (B) <87-82%; (B-) <82-80%; (C+) <80-77%; (C) <77-72%; (C-) <72-70%; (D+) <70-67%; (D) <67-62%; (D-) <62-60%; (E) <60%

Required or Recommended Reading Assignments

Many required readings use chapters from the course text that align with the lectures below. If the reading is not from the required textbook, a copy of the document is uploaded to Canvas in the specified module.

General Description of the Subject Matter of Each Lecture or Discussion

- Introduction to Forensic Science – Students learn the findamentals of forensic science, including how to define a forensic scientist, the disciplines of forensics, the organization of a crime laboratory, who qualifies as an expert witness, and learn about the CSI Effect.
- Crime Scene Investigation – Students spend multiple weeks learning the procedures for properly searching and documenting a crime scene. Topics include scene searches, sketches, photography, and note taking.
- Physical Evidence – Students learn how to package items of physical evidence and discuss analysis/comparison of evidence items.

- Death Investigations – Students learn the proper methods for investigating death scenes and analyze the investigation of the Susan Powell murder.
- Crime Scene Reconstruction – Students learn about modern methods for crime scene reconstruction, including laser scanners and their use in the University of Idaho murders.
- Forensic Biometrics – Students learn the basics of biometric identification – including fingerprints and facial recognition, and the contributions leading up to their implementation in forensic science. Students will learn to analyze and compare fingerprints.
- Impression Evidence - Students learn the basics of impression evidence, including firearms, toolmarks, footwear, and tire impressions. Students will learn to analyze and compare footwear imprints.
- Bloodstain Pattern Analysis – Students will learn the basics of bloodstain pattern analysis and it's application to forensic science. Students will analyze mock stains and determine their directionality and determine the source of a stain.
- Drug Chemstry and Analysis – Students will be given an overview of forensic toxicology and drug analysis. Students will read a scientific article related to the field an interpret the findings of the article.
- Trace Evidence – Students will learn the basics of trace evidence examinaition, including analysis of paint, glass, soil, hairs, and fibers.
- Biological Stain Analysis – Students will learn about DNA analysis. They will also learn the forensic uses of genetic genealogy through a case study on the Golden State Killer.
- Fire and Explosion Investigations – Students will learn about hwo investigations are completed on fire and explosive scenes, specifically challenges relating to these types of crime scenes.
- Document Examination – Students learn basic techniques utilized in forensic document examination.
- Digital, Mobile, & Multimedia Forensics – Students learn the basics of digital forensics and what examinations are possible with today's technology. Students learn about certifications required to perform digital examinations.
- [Extra Credit Module] Additional Fields in Forensics – Students have the opportunity to learn about additional fields or to explore some fields deeper. Topics include creation of mock bloodstains, a case study of John Wayne Gacy (forensic anthropology), and detecting altered photos (digital forensics).

Required Course Syllabus Statements

Generative AI

AI programs are not a replacement for your human creativity, originality, and critical thinking. Writing, thinking, and researching are crafts that you must develop over time to develop your own individual voice. At the same time, you should learn how to use AI and in what instances AI can be helpful to you.

The use of generative AI tools (e.g. ChatGPT, Google Bard, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas
- Fine tuning your research questions
- Finding information on your topic

The use of generative AI tools **is not permitted** in this course for the following activities:

- Drafting an outline

- Checking grammar and style
- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat
- Completing group work that your group has assigned to you, unless it is mutually agreed upon that you may utilize the tool
- Writing any class assignments
- Writing entire sentences, paragraphs or papers to complete class assignments
- You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws, or contain misinformation or unethical content). Your use of AI tools must be properly documented and cited in order to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI. If any part of this is confusing or uncertain, please reach out to me for a conversation before submitting your work.

The UVU Forensic Science Program is also keeping up with artificial intelligence chat bots such as ChatGPT. Believing the technology is here to stay, and will only grow, they feel it's important to understand both its strengths and limitations. AI is already proving its usefulness in brainstorming writing ideas, simplifying complex topics, and performing rudimentary research. They believe AI is a tool with potential usefulness for writers. However, AI is also fraught with serious issues. It possesses accuracy problems while simultaneously sounding very confident about its incorrectness. It also frequently generates fake citations and quotations. It cannot understand the complexities and contexts of human communication. Finally, the way AI is trained on other texts poses several ethical questions about copyright and intellectual theft of property (along with uncritically inheriting the biases of the texts it's trained on).

TO BE CLEAR, copying the exact wording of an AI chatbot is considered plagiarism and means that a student will be held accountable for violating academic integrity. **Any assignment completed through using AI will automatically receive a ZERO grade. If a student continues to violate this policy, they will receive an overall failing grade for the class.** Although many citation guides are already presenting ways to properly use and cite AI, they do not currently believe that citing AI in your work is in line with the standards of academic writing that value knowing the exact author(s) or sources that informed your writing.

Using Remote Testing Software

☐ This course does not use remote testing software.

☒ This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities
Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU Accessibility Services at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity
At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in UVU Policy 541: *Student Code of Conduct*.

Equity and Title IX
Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation
UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a specially dedicated space for meditation, prayer, reflection, or other forms of religious expression.