

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 #: 1350-151

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.

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Course	Attributes	١,

This	course	has	the	fol	lowing	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: Hoa Trinh

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

Grading Scale

Grades are issued at the end of each semester. All grades earned will be reflected on and remain on the official academic transcript. The following grading scale is used:

(A) 92-100%; (B) <87-82% (C) <77-72% (D) <67-62%

 $(A-) \le 92-90\% (B-) \le 82-80\% (C-) \le 72-70\% (D-) \le 62-60\%;$

(B+) < 90-87% (C+) < 80-77% (D+) < 70-67% (E) < 60%

Grading Criteria

Final Grades for this course will be calculated as follows:

Attendance 5%, Homework = 10%, Class Assignments = 10%, Research Paper = 15%, Exam #1 = 15%, Exam #2 = 20%, and Final Exam = 25% of your total grade. All work and examinations will be completed by the due dates as announced by the instructor on Canvas. Due dates on the syllabus class schedule are tentative. Please go with what is on Canvas. Late work will be accepted for most assignments (excluding Research Paper and Exams) with a 5% penalty per day late for a maximum of 50%. If you are sick, have an emergency or exigent circumstance and cannot get your assignments done on time including the Research Paper and Exams, please contact the Professor as soon as possible via Canvas Inbox, and preferably before the due date to get an extension.

Class Assignments, Homework, Exams

Class assignments will make up 10% of your final grade and are intended as class work. Class time will be used to explain the content of the class assignments. Whatever is not completed during class will be the student's responsibility. Please look at the schedule for which assignment to be covered in class that day. The assignments are posted on Canvas within the modules with a due date.

Homework assignments will make up 10% of your final grade. The assignment is posted on Canvas within the modules with a due date.

Three examinations will be given throughout this course. Exam #1 (15% of your final grade) will be based on material from Chapters 1-7; Exam #2 (20% of your final grade) will be based on material from Chapters 8-14; the final examination (25% of your final grade) will be comprehensive, based on materials covered during the entire course. The three exams will be made up of multiple choice and True/False questions. Lecture material and all reading assignments are subject to testing. Students must make every effort to test in accordance with the schedule set on Canvas. Exams will be conducted through Canvas using Proctorio. Textbooks, notes, and any outside materials are prohibited during the multiplechoice portion of the exams.

Exam #1 and #2 will also include a short-answer portion that is opened book/opened notes. Research Paper

Each student is to complete a 3-5 pages research paper. A complete description of this assignment can be found in CANVAS as well as research paper guidelines. **LATE RESEARCH PAPER WILL NOT BE ACCEPTED UNLESS PERMISSION IS GIVEN BY THE PROFESSOR AND MAY BE SUBJECTED TO A HIGHER LATE PENALTY. *If there is an exigent circumstance, please contact the professor.

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

Class Schedule

DATE CLASS TOPICS READING

ASSIGNMENTS DUE

ASSIGNMENTS DUE

Jan 7

Syllabus and course requirements

Jan 9

Pre-recorded Lecture

Introduction and Forensic Science Start: Case Law and Forensic Science

Chapter 1

Jan 14 Finish: Case Law and Forensic Science

Class Assignment: CSI in Pop Culture Class Assignment: Expert Witness

Practical

- Case Law Briefs*
- Melendez Diaz*
- 2009 NAS Report* -

Forensic Reform Bill*

Syllabus/course

requirements HW Questions

Who Are You

Jan 16 Securing/Searching the Crime Scene

Recording the Crime Scene: Notes &

Sketches

Chapter 2

Chapter 3

Class Assignment: CSI in Pop

Culture

Chapter 1 HW Questions

Jan 21

Start: Recording the Crime Scene:

Photography, 3D Laser Scanning, Video

Chapter 3

- 3D Laser CSI*
- 3D Laser Scanning*

Chapter 2 HW Questions

Research paper topic

Jan 23

On call

Finish: Recording the Crime Scene: Photography, 3D Laser Scanning, Video

Class Assignment: Ch 2 and Ch 3

Practical

Ch 3 HW Questions

Jan 28

On call

Collection of Evidence Start: Physical Evidence

Chapter 4 Chapter 5

Class Assignment: Ch 2 and

Ch 3 Practical

Research paper - real case

Jan 30

Finish: Physical Evidence

Class Assignment: Ch 4 and 5 Practical

Ch 4 HW Questions

Feb 4 Death Investigations

Start: Medical Examiner/Autopsy

Chapter 6

Death Investigation

Guidelines*

Chapter 5 HW Questions

Class Assignment: Ch 4 and 5

Practical Feb 6

Finish: Medical Examiner/Autopsy Class Assignment: Death Investigation

Case Study (Case 1)

Research paper – 3 sources

in APA format

Feb 11

Class Assignment: Death Investigation

Case Study (Case 2)

Crime Scene Reconstruction

Chapter 7
Crime Scene

Reconstruction*

Chapter 6 HW Questions Class Assignment: Death Investigation Case Study

Feb 13 Class Assignment: Crime Scene

Reconstruction Practical

Exam 1 Review

Feb 18 EXAM #1 (Ch 1-7): NO LECTURE

Feb 20

Fingerprints Chapter 8 Chapter 7 HW Questions

Class Assignment: Fingerprints

Practical

Class Assignment: Crime Scene Reconstruction

Practical Feb 25

Firearms

Start: Tool Marks & Impression

Evidence Chapter 9

Tire Impression

Article*

Chapter 8 HW Questions

Class Assignment:

Fingerprints Practical

Research Paper - thesis

statement

Feb 27

On call

Finish: Tool Mark & Impression Class Assignment: Firearm Case Study

Mar 4 On call

Start: Bloodstain Pattern Analysis Chapter 10

BPA Case Study*
CNN Case BPA*

Mar 6

Finish: Bloodstain Pattern Analysis Class Assignment: Bloodstain Pattern

Analysis Practical

Chapter 9 HW Questions

Mar 10-

15

SPRING BREAK - NO LECTURE

Mar 18

Drugs Chapter 11 Chapter 10 HW Questions

Class Assignment: Bloodstain Pattern Analysis Practical

Mar 20

On call

Forensic Toxicology Chapter 12 RESEARCH PAPER

Chapter 11 HW Questions

Mar 25

On call

Trace Evidence: Hairs & Fibers Chapter 13 Chapter 12 HW Questions

Mar 27 Trace Evidence: Paint, Glass & Soil Chapter 14 Chapter 13 HW Questions

Apr 1 Exam 2 Review 14 HW Questions

Apr 3 EXAM #2 (Ch 8-14): NO LECTURE

Apr 8 Biological Evidence

Start: DNA Chapter 15

Intro to Molecular Bio*

Apr 10

Finish: DNA

Fire Investigations

Chapter 16 Chapter 15 Review HW

Questions

Apr 15 Post Blast

Document Examination

Boston Bombing After

Action* and Chapter 17

Chapter 16 HW Questions
Apr 17 Computer Forensics
Mobile Devices
Chapter 18
Chapter 19
Chapter 17 HW Questions
Apr 22 LAST DAY OF CLASS
Case Study 4 and Final Exam Review
Chapter 18 and 19 HW
Questions
Apr 29 FINAL EXAM

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 <u>Accessibility Services</u> at <u>accessibilityservices@uvu.edu</u> 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 <u>rights and responsibilities</u>. 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 <u>UVU Policy 541: Student Code of Conduct</u>.

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 – <u>TitleIX@uvu.edu</u> – 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 <u>specially dedicated</u> <u>space</u> for meditation, prayer, reflection, or other forms of religious expression.