Questioned Documents and Crime Scenes

Missouri Grade-Level Expectations (or other standards)
This course is aligned to St. Louis University 1818 FRSC 2600 Introduction to Forensic Science

Learning Goal	Proficiency Scales
Students will be able to analyze basic crime scene and examine and identify sources of questioned documents.	4: Student demonstrates an in-depth inference or advanced application or innovates with the learning goal. 3: Student demonstrates mastery of the learning goal as evidenced by: ● Comparing and contrasting Frye vs. US and Daubert vs Merrell Dow Pharmaceutical. ● Explaining Miranda rights and their application to forensic science. ● Describing fourth and fifth amendment rights as they apply to forensic science. ● Analyzing information about a crime scene to determine if it is primary or secondary scene. ● Evaluating information about evidence to determine if it is primary or secondary transfer, transient, pattern, conditional or associative evidence. ● Examining a document to determine if it is possible for parts of it to be forged. ● Determining the source of a writing by examining the formation of the text.

	● Drawing conclusions about the authenticity of a document by examining the paper, print and application of the print to the document. 2: Student demonstrates he/she is nearing proficiency by: ● Recognizing or recalling specific vocabulary, such as: *miranda rights, fourth and fifth amendment, primary and secondary crime scenes, primary or secondary transfer, transient, pattern, conditional or associative evidence, questioned document, and exemplar* ● Performing processes such as: ○ Identifying the source of a handwriting. ○ Examining the pages of a document for print, text and paper type. 1: Student demonstrates limited understanding or skill with the learning goal.

Firearm Evidence Analysis

Missouri Grade-Level Expectations (or other standards)
This course is aligned to St. Louis University 1818 FRSC 2600 Introduction to Forensic Science

Learning Goal	Proficiency Scales
Students will be able to explain the	4: Student demonstrates an in-depth inference or advanced application

collection, examination and comparison of firearms and toolmark evidence.	or innovates with the learning goal. 3: The student demonstrates mastery of the learning goal as evidenced by: ● Differentiating between caliber and gauge. ● Identifying the areas of a bullet and cartridge case that will have tool marks on them from a firearm. ● Identifying the parts of a firearm that will leave marks on specific places on a bullet or cartridge case. ● Explaining how a barrel is rifled and what occurs to make the striations from rifling unique. ● Identifying which types of toolmarks are unique. ● Determining identity of a toolmark from a set of possible tools. ● Explaining how to collect firearms evidence. 2: Student demonstrates he/she is nearing proficiency by: ● Recognizing or recalling specific vocabulary, such as: *caliber, gauge, firing pin, extractor, ejector, primer cup, cartridge, cartridge case, breech face, striations and toolmark.* ● Performing processes such as: ○ identifying a specific tool that made a specific tool mark from a set of possible tools. ○ restoring the legibility of a damaged serial number using a metal block. 1: Student demonstrates a limited understanding or skill with the learning goal.

Death Investigation

Missouri Grade-Level Expectations (or other standards)

This course is aligned to St. Louis University 1818
FRSC 2600 Introduction to Forensic Science

High School TILS Strand IV: Tools of the Trade: Students will be able to use appropriate digital tools within and across content areas in preparation for post-secondary experiences.

Learning Goal	Proficiency Scales
Students will be able to compare and contrast the work of a medical examiner, forensic anthropologist, forensic artist, and footwear examiner.	4: Student demonstrates an in-depth inference or advanced application or innovates with the learning goal. 3: Student demonstrates mastery of the learning goal as evidenced by: ● Differentiating among manner, cause and mechanisms of death. ● Identifying responsibilities of a forensic pathologists. ● Explaining the cause of rigor, livor and algor mortis and drawing conclusions from their stages about the time of death of a cadaver. ● Analyzing a corpse to establish its identity by ○ Determining the bones necessary to determine age, sex and race of a person; ○ Determining how to uniquely identify a person from bones; ○ Determining the race of a person from a skull;

	○ Determining the sex of a person from the pelvis or skull; ○ Identifying the types of bones required to determine the approximate height of a person from skeletal remains; ○ Identifying the areas of the bones necessary to determine the age of a person from skeletal remains; ○ Explaining how to use a 2-dimensional image of a skull to identify a person. ● Drawing correct conclusions about the source of an unknown footwear impression. ● Determining the characteristics required to make an outsole unique. 2: Student demonstrates he/she is nearing proficiency by: ● Recognizing or recalling specific vocabulary, such as: *forensic pathologist, manner, cause and mechanism of death, rigor, livor and algor mortis, forensic anthropologist, forensic art, 2-d and 3-d facial reconstruction, footwear impression, wear patterns, accidental marks, crepe and calendared outsoles.* ● Performing processes such as: ○ Identifying the bones needed to determine age, sex, and race of a person. ○ Explaining 2-dimensional facial reconstruction. ○ Drawing conclusions about the source unknown footwear impressions. 1: Student demonstrates a limited understanding or skill with the learning goal.

Crime Scene Investigation

Missouri Grade-Level Expectations (or other standards)

This course is aligned to St. Louis University 1818
FRSC 2600 Introduction to Forensic Science

- High School TILS Strand II: Information Literacy: Students will be able to research and synthesize information; use a variety of digital resources; retrieve and evaluate reliability and accuracy from appropriately cited sources; draw evidence-based conclusions in order to prove comprehension of course objectives.
- High School TILS Strand IV: Tools of the Trade: Students will be able to use appropriate digital tools within and across content areas in preparation for post-secondary experiences.

Learning Goal	Proficiency Scales
Students will be able to draw conclusions about the historical development of crime scene processing.	4: Student demonstrates an in-depth inference or advanced application or innovates with the learning goal. 3: Student demonstrates mastery of the learning goal as evidenced by: ● Researching and interpreting the information from multiple sources about the events that lead to a crime in a famous case in forensic science prior to 1989. ● Evaluating the information from resources about the famous case. ● Explaining thoroughly and concisely the details of the case and how the case would be investigated differently today.

	2: Student demonstrates he/she is nearing proficiency b: ● Recognizing or recalling specific vocabulary, such as: *chain of custody, digital evidence, investigators, crime scene, database, IAFIS, NIBIN, and CODIS.* ● Performing processes such as: ○ Researching information about a famous case ○ Outlining the information for the case 1: Student demonstrates a limited understanding or skill with the learning goal.