



El Camino College  
COURSE OUTLINE OF RECORD – Official

<b>Course Acronym:</b>	AJ
<b>Course Number:</b>	142
<b>Descriptive Title:</b>	Introduction to Digital Evidence
<b>Division:</b>	Health Sciences and Athletics
<b>Department:</b>	Administration of Justice
<b>Course Disciplines:</b>	Administration of Justice
<b>Catalog Description:</b>	This course provides students with an understanding of digital crime scene investigation. Topics include court presentation of evidence requirements involving digital forensic evidence, digital imaging and metadata. Recognized legal and professional standards will be reviewed. Students will be exposed to contemporary digital forensic tools and processes used in collecting digital evidence from seizure to the admission as evidence in a criminal trial. Procedural and legal issues in the handling, processing and examination of digital evidence will be studied. Students will learn about methods of handling the chain of custody regarding some digital evidence and discovery procedures.
<b>Prerequisite:</b>	
<b>Co-requisite:</b>	
<b>Recommended Preparation:</b>	Administration of Justice 100 and eligibility for English 1A
<b>Enrollment Limitation:</b>	
<b>Hours Lecture (per week):</b>	3
<b>Hours Laboratory (per week):</b>	0
<b>Outside Study Hours:</b>	6
<b>Total Course Hours:</b>	54
<b>Course Units:</b>	3
<b>Grading Method:</b>	Letter Grade only
<b>Credit Status:</b>	Credit, degree applicable
<b>Transfer CSU:</b>	Yes
<b>Effective Date:</b>	10/19/2015
<b>Transfer UC:</b>	No
<b>Effective Date:</b>	
<b>General Education:</b>	
<b>ECC</b>	
<b>Term:</b>	
<b>Other:</b>	

<b>CSU GE:</b>	
<b>Term:</b>	
<b>Other:</b>	
<b>IGETC:</b>	
<b>Term:</b>	
<b>Other:</b>	
<b>Student Learning Outcomes:</b>	<p><b>SLO #1</b></p> <p>Students will achieve an understanding of metadata, and a proficiency in recognizing, locating, recovering, and collecting the data from a digital forensic file.</p> <p><b>SLO #2</b></p> <p>Students will describe the uses of metadata, and its digital forensic evidentiary value.</p> <p><b>SLO #3</b></p> <p>Students will be able to recognize, locate, process, and examine digital forensic evidence from initial crime scene investigations, and continuing investigations, as the items proceed through the criminal justice system, from seizure to testing to the full scrutiny of the courts.</p>
<b>Course Objectives:</b>	<ol style="list-style-type: none"> <li>1. Compare and contrast digital evidence collection methods at crime scenes/incident scenes.</li> <li>2. Analyze rules of evidence that apply to digital evidence, both federal and California examples.</li> <li>3. Describe the various computer document formats and evidentiary issues with those formats.</li> <li>4. Categorize the effects of the discovery process as it relates to documents, writings, audio, electronic, official records, and photography.</li> <li>5. Evaluate the role of courtroom electronics and their relationship to the presentation of audio and visual evidence, and determine the appropriate technology to utilize to present the facts/evidence in a criminal trial.</li> </ol>
<b>Major Topics:</b>	<p><b>I. OVERVIEW OF DIGITAL EVIDENCE (3 hours, lecture)</b></p> <p>A. Digital evidence, legal background and purpose</p> <p>B. Prevalence and synopsis of landmark advances in digital evidence</p> <p><b>II. FORENSICS (5 hours, lecture)</b></p> <p>A. The use of science and technology to investigate and establish facts in crimes</p> <p>B. The history of digital imaging, digital resolution, and the Scientific Working Group for Imaging Technologies (SWGIT)</p> <p><b>III. CRIME SCENE INVESTIGATION REVIEW AND MANAGEMENT (3 hours, lecture)</b></p> <p>A. Digital procedures</p> <p>B Special requirements</p>

C. First responder responsibilities

**IV. CRIME SCENE INVESTIGATION AND THE APPLICATION OF DIGITAL FORENSICS (6 hours, lecture)**

A. Rules which apply to digital evidence

B. Metadata

C. Digital evidence handling, seizure requirements, documentation

D. Chain of custody requirements

**V. APPLICATIONS OF DIGITAL FORENSICS IN CRIMINAL JUSTICE (3 hours, lecture)**

A. Digital still imaging

B. Digital video

C. SWGIT

**VI. DIGITAL EVIDENCE SEIZURES (4 hours, lecture)**

A. Potential sources of evidence

B. Devices of evidentiary value

C. Investigation methods

**VII. DIGITAL EVIDENCE VERSUS ANALOG METHODS (6 hours, lecture)**

A. Advantages and disadvantages

B. Digital records

C. Equipment requirements

**VIII. DIGITAL EVIDENCE FORENSIC EXAMINATIONS (4 hours, lecture)**

A. The role of the forensic examiner

B. The Federal Bureau of Investigation (FBI) Regional Forensics Laboratory

C. Handling digital evidence

D. Metadata examinations

**IX. DIGITAL EVIDENCE (3 hours, lecture)**

A. Legal issues and challenges

B. Equipment preparation

	<p>C. Data acquisition</p> <p>D. Documentation requirements</p> <p><b>X. DIGITAL EVIDENCE ADMISSIBILITY IN COURT (6 hours, lecture)</b></p> <p>A. Rules covering digital evidence</p> <p>B. History of digital evidence</p> <p>C. What is "Original" in terms of digital evidence</p> <p><b>XI. PRESENTATION METHODS OF DIGITAL EVIDENCE (6 hours, lecture)</b></p> <p>A. Documentation/discovery procedures</p> <p>B. The digital courtroom</p> <p>C. Meeting the legal burden of discovery on criminal cases</p> <p><b>XII. SPECIAL RULES FOR DIGITAL EVIDENCE (2 hours, lecture)</b></p> <p>A. Guidelines from the SWGIT</p> <p>B. Standard operating procedures</p> <p><b>XIII. CRIMINAL COURT DIGITAL EVIDENCE EXERCISE (3 hours, lecture)</b></p> <p>A. Mock court demonstration</p> <p>B. Exercise with student participation</p>
<b>Total Lecture Hours:</b>	54
<b>Total Laboratory Hours:</b>	0
<b>Total Hours:</b>	54
<b>Primary Method of Evaluation:</b>	1) Substantial writing assignments
<b>Typical Assignment Using Primary Method of Evaluation:</b>	Examine a simulated piece of digital evidence, and locate and capture the Meta data forensic evidence. Prepare a one-page report describing the results and submit report to the instructor.
<b>Critical Thinking Assignment 1:</b>	Given a photographic and word description of a potential digital forensic crime scene, analyze and document the appropriate possible sources of digital forensic evidence for collection and advanced examination. Prepare a one to two page report with the results and submit report to the instructor.
<b>Critical Thinking Assignment 2:</b>	Given evidence to present in a criminal trial, identify the most effective method to present various items of evidence in court, determining the technology to utilize from a list of available items. Prepare a one to two page report outlining the results and submit report to the instructor.

<b>Other Evaluation Methods:</b>	Class Performance, Embedded Questions, Essay Exams, Homework Problems, Matching Items, Multiple Choice, Objective Exam, Term or Other Papers
<b>Instructional Methods:</b>	Demonstration, Discussion, Group Activities, Guest Speakers, Lecture, Multimedia presentations, Other (specify), Role play/simulation
<b>If other:</b>	
<b>Work Outside of Class:</b>	Answer questions, Problem solving activity, Required reading, Study, Written work (such as essay/composition/report/analysis/research)
<b>If Other:</b>	
<b>Up-To-Date Representative Textbooks:</b>	Randal Davis, <u>Evidence Collection and Presentation</u> , 2nd ed., Law Tech Custom Publishing, 2016 (Discipline Standard)
<b>Alternative Textbooks:</b>	
<b>Required Supplementary Readings:</b>	
<b>Other Required Materials:</b>	Access to personal computer: Windows or MAC
<b>Requisite:</b>	
<b>Category:</b>	
<b>Requisite course(s): List both prerequisites and corequisites in this box.</b>	
<b>Requisite and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding course objective under each skill(s).</b>	
<b>Requisite Skill:</b>	
<b>Requisite Skill and Matching Skill(s):</b> <b>Bold the requisite skill(s). If applicable</b>	
<b>Requisite course:</b>	Administration of Justice 100
<b>Requisite and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding course objective under each skill(s).</b>	<p><b>Describe future developments in the area of forensic evidence.</b></p> <p>AJ 100 - Identify and describe special issues in the criminal justice system involving juvenile delinquency, drugs, and the future development.</p> <p><b>Discuss the concept of "chain of custody."</b></p> <p>AJ 100 - Convey an understanding of the process of adjudication.</p>
<b>Requisite Skill:</b>	Eligibility for English 1A
<b>Requisite Skill and Matching skill(s):</b> <b>Bold the requisite skill. List the corresponding</b>	<b>This course involves the writing of essays. Student's success will be enhanced with the following skills:</b>

<b>course objective under each skill(s). If applicable</b>	Write a well-reasoned essay that demonstrates application of the academic writing process.
<b>Enrollment Limitations and Category:</b>	
<b>Enrollment Limitations Impact:</b>	
<b>Course Created by:</b>	Craig Neumann
<b>Date:</b>	07/15/2014
<b>Original Board Approval Date:</b>	10/19/2015
<b>Last Reviewed and/or Revised by:</b>	Dina Mauger
<b>Date:</b>	02/11/2023
<b>Last Board Approval Date:</b>	07/17/2023 effective FALL 2024