

Central Christian College of Kansas

Title: Introduction to Forensic Science

Code: SS-CJ 316

Credits: 3

Prerequisites: No

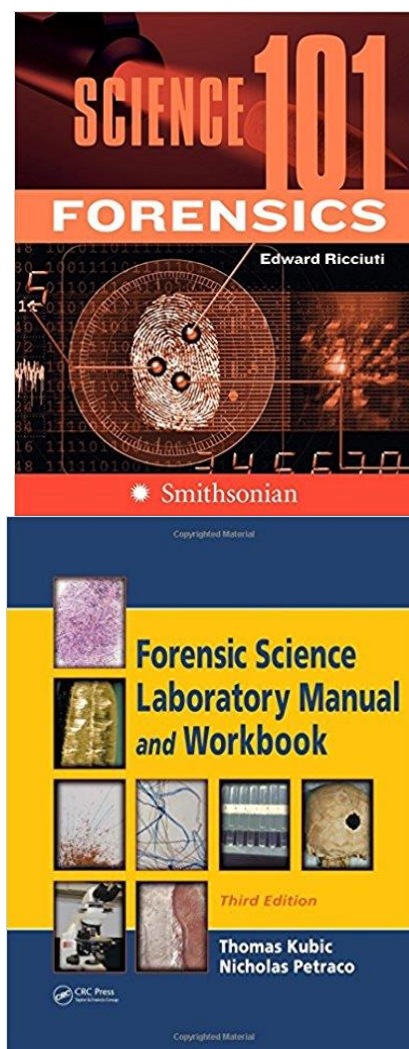
Description: Overview of general principles of forensic science, techniques, equipment, and methodologies as used in crime laboratories. Focus on fingerprint and firearm identification, trace evidence (hair, fiber, paint, and glass), blood, DNA evidence, forensic documentation examination, crime scene kits, and forensic microscopy.

At the end of the course, you will be able to:

- Explain the basics in crime scene management including process and handling of evidence.
- Explore various types of laboratory services and forensic examinations.
- Demonstrate knowledge of the history of criminology, roles of personnel, and apply a basic understanding of forensics as advances to the courtroom.
- Examine and critically review forensics in real cases and learn from those cases, processes and procedures to manage a crime scene
- Conduct applied laboratory exercises and lab reports first hand to further understand forensics.

Textbooks:

- Ricciuti, E. (2007). *Science 101: Forensics*. New York, NY: Harper Perennial.
- Kubic, T. & Petraco, N. (2009). *Forensic Science Laboratory Manual and Workbook* (3rd ed.). Boca Raton, FL: CRC Press.



Topic	Readings	Assignments
<ul style="list-style-type: none"> • Early Beginnings of Forensics • First Responder/Crime Scenes • The Scientific Method 	<p>Science 101: Forensics</p> <ul style="list-style-type: none"> • Chapter 1 pages 5 - 17 • Chapter 2 pages 18 - 36 <p>Forensic Science Laboratory Manual and Workbook</p> <ul style="list-style-type: none"> • Experiment 2 pages 11 - 52 	<ul style="list-style-type: none"> • Pre-test • Plagiarism Certificate • Discuss 1: History of Forensic Science • Discuss 2: JonBenét Ramsey • Discuss 3: Observations and Conclusions • Week 1 Lab • Apply: JonBenét Ramsey Case

Topic	Readings	Assignments
<ul style="list-style-type: none"> • Crime Labs • Forensic Pathology • Documenting a Crime Scene 	<p>Science 101: Forensics</p> <ul style="list-style-type: none"> • Chapter 3 pages 35 - 51 • Chapter 4 pages 53 - 67 <p>Forensic Science Laboratory Manual and Workbook</p> <ul style="list-style-type: none"> • Experiment 8 pages 53 - 60 <p>Outside Readings</p> <ul style="list-style-type: none"> • The New High • Crime Scene Investigator 	<ul style="list-style-type: none"> • Discuss 1: O.J. Simpson • Discuss 2: Sacco and Vanzetti • Evaluation • Week 2 Lab
Topic	Readings	Assignments
<ul style="list-style-type: none"> • Forensic Anthropology • Forensics Implemented • Forgery Detection Exercise 	<p>Science 101: Forensics</p> <ul style="list-style-type: none"> • Chapter 5 pages 69 - 83 • Chapter 6 pages 84 - 107 <p>Forensic Science Laboratory Manual and Workbook</p> <ul style="list-style-type: none"> • Experiment 24 pages 171 - 175 <p>Outside Readings</p> <ul style="list-style-type: none"> • Fingerprinting Reliability Draws Growing Court Challenge • Examination of Soil, Physical Evidence Bulletin 	<ul style="list-style-type: none"> • Discuss 1: Jigsaw Murders • Discuss 2: Lindbergh • Week 3 Lab • Apply: Prosecutive Report
Topic	Readings	Assignments
<ul style="list-style-type: none"> • Understanding DNA • Crime Chemistry 	<p>Science 101: Forensics</p>	<ul style="list-style-type: none"> • Discuss 1: Deborah Green

<ul style="list-style-type: none"> Fingerprint Matching Exercise 	<ul style="list-style-type: none"> Chapter 7 pages 106 - 124 Chapter 8 pages 125 - 139 <p>Forensic Science Laboratory Manual and Workbook</p> <ul style="list-style-type: none"> Experiments 5 & 6 pages 31 - 46 <p>Outside Readings</p> <ul style="list-style-type: none"> Kansas Doctor is Accused in Fire That Killed 2 of Her Children 	<ul style="list-style-type: none"> Discuss 2: Martin Luther King/James Earl Ray Evaluation Week 4 Lab
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Topic	Readings	Assignments
<ul style="list-style-type: none"> Criminal Profiles Nature and Crime Foot Impression Exercise 	<p>Science 101: Forensics</p> <ul style="list-style-type: none"> Chapter 9 pages 141 - 155 Chapter 10 pages 157 - 173 <p>Forensic Science Laboratory Manual and Workbook</p> <ul style="list-style-type: none"> Experiment 18 pages 133 - 140 <p>Outside Readings</p> <ul style="list-style-type: none"> Crime Scene Journal Vol. 1 (Issue 1) 	<ul style="list-style-type: none"> Discuss 1: Dennis Rader “BTK” Discuss 2: Ted Bundy Week 5 Lab

Topic	Readings	Assignments
<ul style="list-style-type: none"> Crime Mysteries Popularization of Forensics 	<p>Science 101: Forensics</p> <ul style="list-style-type: none"> Chapter 11 pages 173 - 187 Chapter 12 pages 188 - 203 	<ul style="list-style-type: none"> Discuss 1: Timothy McVeigh Discuss 2: Geographic Area Evaluation Apply: Bombings Post-test

	Outside Readings <ul style="list-style-type: none"> • A Guide for Investigating Bomb and Explosion Scenes • How do Fertilizer Bombs Work? 	
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Assessments	Number	Points Each	Total
Discussion	13	25	325
Labs	5	75	375
Applies	3	50	150
Evaluations	3	50	150
Pre-Test Participation	1	5	5
Post-Test Participation	1	5	5
Total			1010

Students are expected to post in the discussion board a **minimum** of **three separate posts** on three separate post dates per discussion thread. The three posts for **each** thread must include:

1. One "initial" post in response to the instructor's question (or stated assignment) no later than Thursday of each course week.
2. Two "follow up" posts in response to at least one classmate by Sunday of each course week.

The initial response to a discussion question should substantively demonstrate familiarity with the content of the question. The response should be 150-200 words in length. To ensure the discussion is a collective and focused exploration of the topic in the question, the discussion thread should remain focused on the question.

The timing of responses is important since other students are dependent on your postings in order to fully develop the discussion and to post "follow up" discussion entries. Responses should occur in the week the discussion question is posted for reply. Preparation for the response is encouraged to ensure a thoughtful and well-founded contribution to the discussion.

Each learner is expected to both respond initially (by Thursday each week) to the discussion question or assignment instruction posted by the instructor/facilitator each week and make at least two follow-up responses to other learners' postings in the discussion thread by the end of

the week (Sunday at 11:59pm). The purpose is to ensure an informed and thoughtful dialogue focused on the topic.

Initial Response (Standard Posting Requirements)

0 Points	1-2 Points	3-4 Points	5 Points
No initial response posted.	Initial response is superficial (less than 100 words), and/or posted after Thursday at 11:59 p.m. CT.	A substantive initial response is posted prior to Thursday at 11:59 p.m. CT that contains 100-149 words.	A substantive initial response is posted prior to Thursday at 11:59 p.m. CT that includes at least 1 reference to course material or another reliable source (150 words or more).

Initial Response (Quality of Content)

0 Points	1-2 Points	3-4 Points	5 Points
Response is irrelevant to the question and does not add to the intent of the discussion.	Response addresses the question, but lacks depth or goes off topic.	Response addresses the question, though greater reflection or development of thought would be helpful.	Response addresses the question, is reflective, and represents a substantive contribution to the discussion.

Follow-Up Posts

0 Points	1-2 Points	3-4 Points	5 Points
No follow-up posts made.	Follow-up posts do not provide sufficient analysis or synthesis of the discussion.	Follow-up posts demonstrate an appreciation for the input of others and add to the discussion.	Follow-up posts elaborate on the comments of others and add to the discussion with further analysis and synthesis.

Mechanics

0 Points	1-2 Points	3-4 Points	5 Points
Posts lack any organization and/or contain multiple errors in spelling or mechanics.	Posts are somewhat organized, but interrupted by significant errors in spelling and mechanics.	Posts could benefit by a bit more organization and attention to mechanical details.	Posts are clear and formatted in a way that is easy to read, free from spelling and mechanical errors.

Frequency of Participation

0 Points	1-2 Points	3-4 Points	5 Points
No participation in discussion.	All posts made on the same day.	Posts made on 2 different days.	Posts made on 3 (or more) different days.

Apply

There are **three** application assignments in this course. These are designed so you apply the knowledge and skills you learn during the week.

Introduction

Absent	Needs Improvement	Proficient
There is no introduction to the paper. <i>(0 points)</i>	There is an introduction, but it does not introduce the topic, its importance, and/or alert readers to the structure of the discussion of your ideas. <i>(1-6 points)</i>	There is an introduction that introduces the topic, its importance, and it alerts readers to the structure of the discussion of your ideas. <i>(7 points)</i>

Body (Use of Course Terms and Concepts)

Absent	Needs Improvement	Proficient
No course terms and concepts were used. <i>(0 points)</i>	Some of the course terms and concepts were used inappropriately or key terms and concepts were missing from the discussion. <i>(1-19 points)</i>	All of the relevant course terms and concepts were present and used appropriately in the discussion. <i>(20 points)</i>

Conclusion

Absent	Needs Improvement	Proficient
There is no conclusion to the paper. <i>(0 points)</i> .	There is a conclusion, but it does not synthesize the main ideas of the paper, and/or provides implications for research and/or practice. <i>(1-7 points)</i>	There is a conclusion that synthesizes the main ideas of the paper, and/or provides implications for research and/or practice. <i>(8 points)</i>

Writing Mechanics (e.g. Spelling, Grammar, etc.)

Absent	Needs Improvement	Proficient
The paper had severe problems with spelling, grammar, etc. errors. <i>(0 points)</i>	The paper had some spelling, grammar, etc. errors. <i>(1-4 points)</i> .	The paper had very minimal spelling, grammar, etc. errors. <i>(5 points)</i> .

Format (e.g., length, font size, margins, in-text citations and reference list in APA style)

Absent	Needs Improvement	Proficient
The paper did not meet the minimum format requirements. <i>(0 points)</i>	The paper met some of the format requirements. <i>(1-9 points)</i>	The paper met all format requirements. <i>(10 points)</i>

Evaluations

There are **three** evaluations in this course: covering the knowledge and skills discussed during the week. Each evaluation has **ten** questions at **five** points each.

The final project will provide you the opportunity to demonstrate your ability to apply what you have learned throughout this course.

Final Project

Please scroll down to read the instructions for this assignment.

Content Requirements

Your final project will be a 3-5-page paper on a criminal act of your choice. Here are your instructions.

- Choose a crime that is prevalent in society
- Define the crime using your state statute

What are some statistics of the crime in your town? What about at the state and national level? Here is a website to help with your research: <https://ucr.fbi.gov/ucr-publications>

What is the causation of the crime? Briefly discuss which of the three major sociological theories is most likely the causation.

Offender profile:

- Who is the offender?
- Gender, race, age
- Socioeconomic status
- Education level
- Employment
- Personality characteristics

Victim profile:

- Who is the victim?
- Do they target the same type of victim?
- Why or why not?

Give an example of the crime in real life.

Solving the crime: How is the crime generally solved if it's solved at all. What are some deterrents used to stop the crime from happening again? What types of punishment or rehabilitative services does the offender receive? What are the recidivism rates?

Document	MS Word
Type:	
Paper Size:	8.5 X 11"
Length:	3-5 pages
Margins:	1"
Font:	10-12 pt Times New Roman or a similar font.
Line	Double. No extra double space between paragraphs please.
Spacing:	
Paper	<ul style="list-style-type: none">• Cover Page• Introduction• Body
Structure:	

- Conclusion
- References

In-text
Citations &
Reference
List Style
File Naming
Convention

APA (as outlined in *Undergraduate Writing Guide* located in *Doc Sharing*)

LastNameFirstName_FinalPaperProject
Example: DoeJohn_FinalPaperProject

Criteria	Ratings	
	Absent	
Introduction	There is no introduction to the paper. (<i>0 points</i>)	<p>Needs Improvement</p> <p>There is an introduction, but it does not introduce the topic, its importance, and/or alert readers to the structure of the discussion of your ideas. (<i>1-34 points</i>)</p> <p>Some of the course terms and concepts were used inappropriately or key terms and concepts were missing from the discussion. (<i>1-79 points</i>)</p> <p>There is a conclusion, but it does not synthesize the main ideas of the paper, and/or provides implications for research and/or practice. (<i>1-34 points</i>)</p> <p>The paper had 5-10 spelling, grammar, etc. errors. (<i>1-19 points</i>)</p>
Body (Use of Course Terms and Concepts)	No course terms and concepts were used. (<i>0 points</i>)	<p>Proficient</p> <p>There is an introduction that introduces the topic, its importance, and it alerts readers to the structure of the discussion of your ideas. (<i>35 points</i>)</p> <p>All of the relevant course terms and concepts were present and used appropriately in the discussion. (<i>80 points</i>)</p> <p>There is a conclusion that synthesizes the main ideas of the paper, and/or provides implications for research and/or practice. (<i>35 points</i>)</p> <p>The paper had very minimal spelling, grammar, etc.</p>
Conclusion	There is no conclusion to the paper. (<i>0 points</i>)	
Writing Mechanics (e.g. Spelling,	The paper had 10 or more spelling, grammar, etc. errors. (<i>0 points</i>)	

Grammar,
etc.)

Format
(e.g.,
length, font
size,
margins, in-
text
citations
and
reference
list in APA
style)

The paper did not meet the minimum
format requirements and/or no APA
citation. (*0 points*)

The paper met some
of the format
requirements. (**1-19
points**)

errors. (*20
points*)

The paper met
all format
requirements
and APA
requirement. (*20
points*)