



## 2022-2023 Course Syllabus

### FORENSIC SCIENCE AND CRIMINAL INVESTIGATION

*“Respectu omnium”*

#### Teacher Information

Name: Jeffrey Lane

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Office Hours: 3:15 to 3:45 pm

#### School Philosophy

##### *Mission Statement*

Luella High School will graduate each student college and career ready–life ready.

##### *Our Vision*

Working together as a complete school community, Luella High School will provide each student and staff member with the highest quality opportunities to grow, explore, and own her/his growth and success.

##### *Our Beliefs*

- We believe that our work is about producing a well-educated, productive community member who will embrace lifelong learning, both traditionally as well as non-traditionally.
- We believe in a safe, orderly, caring environment for all staff and students that builds on individual strengths through personalization.
- We believe that learning and becoming college and career ready is the key to a successful future in all areas of life.
- We believe in the Lion character embodied by personal integrity, honor, courage, personal responsibility, service to the community, determination, self-awareness and commitment.
- We believe in each person accepting responsibility for their own actions.
- We believe each person should be continuously committed to the betterment of their community.
- We believe in the freedom of each individual to voice their perspectives in an appropriate, responsible manner.
- We believe in the value of diverse opinions, backgrounds, and experiences.
- We believe in the importance of self-confidence and one's ability to succeed through personal discipline, determination, and hard work.
- We believe in the importance of an effective system for consistent communication between and among staff, students, and administration.

#### Course Description

Forensic Science and Criminal Investigations is a course designed to contextualize scientific principles within the career studies of students interested in criminal justice. The course will utilize scientific equipment; therefore, instructors should have access to a science lab if their Career and Technical Education lab is not equipped. Students will study the forensic application of principles of chemistry, biology, physics and other disciplines. Students will utilize chromatography, electrophoresis, microscopic observation, and other scientific techniques in their studies. Students will also learn some investigative techniques and crime scene investigation skills through the lens of the scientific method. The prerequisites for this course are Introduction to Law, Public Safety, Corrections and Security and Criminal Justice Essentials.

#### Learning Targets

Students who successfully complete (*Course Name*) will be competent in the following areas:

Understand and appreciate the role of science in criminal investigation

Basic knowledge of various pieces of equipment used in the crime lab as to how they are used for criminal investigation  
 Identifying and categorizing various forms of evidence  
 Autopsy process  
 Techniques for estimating time of death  
 Differentiate between cause of death and manner of death  
 Understand and appreciate the role of chemistry and biology in the investigation of crime  
 Common toxins used in homicide  
 Fingerprint classification  
 Basic DNA analysis  
 Basic serology, forensic anthropology, forensic odontology, forensic entomology  
 Legal standards for admissibility of scientific evidence in court

**Course Overview**

The course will examine the role of science in criminal investigation, various scientific techniques used in the analysis of evidence, fingerprint classification, casting of impressions, blood spatter analysis, odontology exercises, all culminating in a mock crime scene investigation.

Please note dates/timeframes are subject to change and are an estimate.

Unit & Topic	Assessments	Dates/Timeframe
1: Characteristics of Science; Basic Concepts of Forensic Science	2 Quizzes 8 Lesson Recap Assignments Characteristics of Science Exercise Aspects of Science and Scientific Method Exercise Locard’s Exchange Principle Experiment Evidence ID/Comparison Exercise Evidence Characteristics Exercise Evidence Processing Exercise Evidence-Guided Investigation Exercise Chain of Custody Exercise Unit Exam	8/3/22-9/2/22
2: Death Investigation; Forensic Chemistry	3 Quizzes 7 Lesson Recap Assignments Cause and Manner of Death Exercise Gunshot Wound Recognition Exercise Edged Wound Recognition Exercise Strangulation Wound Recognition Exercise Autopsy Video Exercise Paper Chromatography Experiment Ninhydrin Experiment	9/6/22-9/30/22
3: Forensic Biology Forensic Science in the Courtroom	3 Quizzes 10 Lesson Recap Assignments	10/3/22-10/28/22

	Lifting Fingerprint Lab Blood Typing Lab Odontology Lab Case Discussion re Expert Witness Testimony Unit Exam	
4: Blood Spatter, Firearms, and Impression evidence	1 Quiz 3 Lesson Recap Assignments Blood spatter height experiment Angle of impact exercise Area of convergence exercise Blood Spatter Stringing Exercise Blood spatter lab Microscopic bullet comparison exercise Impression casting lab Unit Exam	10/31/22-12/9/22
SEMESTER EXAM		12/16/22
5: Microscope and Trace Evidence	2 Quizzes 5 Lesson Recap Assignments Hair Analysis Lab Fiber Analysis Lab Glass Fracture Analysis Lab Soil Density Lab Unit Exam	1/9/23-2/3/23
6: Interview/Interrogation and Behavioral profiling	3 Quizzes 8 Lesson Recap Assignments Video summaries Communication dynamics Legal issues research and discussion (Case law) Behavioral Profiling Exercise Unit Exam	2/6/23-3/10/23
7: Crime Scene Investigation	3 Quizzes 6 Lesson Recap Assignments Evidence recognition exercise Crime Scene security exercise Crime scene photography lab Crime scene sketch lab Crime scene search techniques Outdoor crime scene search exercise Guest Speaker: GBI Crime Scene Unit Mock Crime Scene Investigation Unit Exam	3/13/23-5/5/23
SEMESTER FINAL EXAM		5/15/23

### Instructional Framework

Block classes at Luella High School will be organized according to a [consistent structure of learning activities](#) that includes an opening (including mini-lesson), work session (comprised of small-group work and independent practice), and a closing (often including formative assessment of student understanding). A combination of synchronous and asynchronous lecture, demonstration, videos, modeling, discussion, graphic organizers, labs, presentations, independent work, cooperative learning, and problem-based learning will be used in this course. All calendars, syllabi, assignments, and other necessary information will be posted on Google Classroom. Google Classroom access codes will be provided to all students as soon as available. Students are encouraged to monitor Google Classroom on a regular basis to remain abreast of announcements, assignments, changes in schedule, and other important information.

### Assessments and Grading

Graded assignments will focus on students' gaining mastery, and grades will be calculated per Henry County Schools policy as follows:

<b>Assessments</b>	40%	end-of-unit tests, essays, presentations, projects
<b>Practice Work</b>	40%	in-class learning activities, homework, discussion, peer review, reflection
<b>Final Exam</b>	20%	end-of-semester cumulative assessment including multiple modalities

### Attendance Policies

Students will follow the Henry County Schools and Luella High School attendance policies.

### Class Expectations

1. Students will come to class on time, prepared, and ready to learn.
2. Students will complete all assigned readings and practice work so that they can be active participants in learning activities.
3. Students will complete all assignments, including homework, by deadlines. Make-up work is only accepted after an excused absence. It is the student's responsibility to ask teacher for that work during office hours (not during class time). **SEE QUIZ/EXAM POLICY AND LATE WORK SUBMISSION POLICY (Below)**
4. The teachers and students will work together for a respectful, safe classroom (virtually/in person).
5. Participation in class discussions will enhance all students' learning experiences.

### QUIZ/EXAM POLICY

Students are expected to take assigned quizzes and exams on the date(s) scheduled and while in class. **Students who attend class when a quiz/exam is given and do not take the quiz/exam will not be allowed to make-up the quiz/exam.** A grade of "M" (M=0) will be entered into Infinite Campus.

### LATE WORK SUBMISSION POLICY

As stated above, students are expected to turn in assigned work (exit tickets, projects, presentations, quizzes, exams) by the assigned due date. Late work will **ONLY** be accepted if submitted before the end of the current Unit of instruction with a point reduction of **5 points per day** the assignment is late. Work not submitted during the Unit of instruction will be assigned a grade of "M" in Infinite Campus. Only under extreme circumstances shall a student be allowed to submit work after the Unit deadline.

**Calendars for each Unit will be posted on Google Classroom. Based on potential changes in schedules, the calendar may be adjusted and such will be communicated with the class via classroom announcement, and Google Classroom.**

### Plagiarism, Cheating, and Academic Integrity

Plagiarism is the practice of copying words, sentences, images, or ideas for use in written or oral assessments without giving proper credit to the source. Cheating is defined as the giving or receiving of illegal help on anything that has been determined by the teacher to be an individual effort. Both are considered serious offenses and will significantly affect your course grade. Please refer to the Student Code of Conduct booklet for additional information.

### Outside Classroom Communication

Instructor communication with students will be restricted to school matters only. Instructor communication with students will be via **school email only** and postings to Google Classroom. Instructor communication with parents/legal guardians will be via the parent's/legal guardian's email account or phone number on file with the school. Students will communicate with the instructor via their school email and the instructor's school email account. **The instructor will not provide his personal email address or phone number to a student under any circumstances!**

### Classroom Culture/Decorum/Behavior

- It is hoped that **our** (yours and mine) conduct will rise to fulfill the meaning of our class motto: *Respectu omnium* (Respect for all).
- Students are expected to demonstrate respect and courtesy to each other as well as the instructor.
- The instructor is expected to demonstrate respect and courtesy to each student.
- Unbecoming classroom behavior will not be tolerated!
- Cell phones, earbuds, and other electronic devices will not be used in the classroom without instructor approval.
- **UNDER NO CIRCUMSTANCES WILL STUDENTS BE ALLOWED TO TALK ON THE PHONE WHILE IN CLASS!!!**
  - **In cases of emergency/serious urgency, the student shall alert the teacher and the teacher will make accommodations.**
    - Chromebooks shall be allowed for academic purposes only.
- Talking among students should be kept to a minimum so as not to disrupt class and cause distractions to the instructor and fellow students.
- **No ski masks, sunglasses**
- No food will be allowed in the classroom unless medically necessary.
- Students will refrain from entering the forensic lab and courtroom area unless authorized and/or instructed to do so.
  - The forensic lab and courtroom are designed for specific instructor supervised activities.
- General classroom disciplinary matters will be handled based on the three strikes model, to wit:
  - 1<sup>st</sup> infraction = Strike 1 – Warning
  - 2<sup>nd</sup> infraction = Strike 2 – Phone/email to parent/legal guardian
  - 3<sup>rd</sup> infraction = Strike 3 – Official disciplinary write-up

**NOTE:** The instructor reserves the right to change or deviate from the syllabus at any given time with or without notice.

### Syllabus Acknowledgement

Please acknowledge that you have read and understand the information explained above.

Type course name in the box below.

Type teacher name in the box below.

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Type student name in the box below.

Type parent/guardian name in the box below.

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Insert student signature in the box below.\*

Insert parent/guardian signature in the box below.\*

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**\*Instructions for inserting signature.**

1. Place the cursor in signature box.
2. Click the INSERT tab at top of document (*image below*).
3. Choose DRAWING (*image below*).
4. Select SCRIBBLE in the drawing dropdown options (*image below*).
5. Sign using Chromebook touchscreen.
6. Click SAVE AND CLOSE.

