| Teacher Name: Maureen DeLacy  | February 10, 2022  | Grade Level: Blended 9 - 12  |  |  |
|---|--|--|--|--|
| Course: Criminal Justice Operations 1   | The History and Science of Fingerprints  | Periods: 1, 2, 3, 5, 7   |  |  |
| Unit Learning Goal: Students will understand the fingerprints in identifying people, and the use of fingerprints in identifying people.   | Differentiated Instruction   |  |  |  |
| <ul> <li>the fingerprinting of suspects.</li> <li>Describe criminal law procedures in Florida related and upon conviction for a felony at sentencing.</li> <li>Identify the three classes of fingerprint pattern characteristics.</li> <li>Name and identify minutiae details in fingerprint Demonstrate the proper technique for rolling from the fingerprint card.</li> <li>Analyze and compare fingerprint impressions to</li> </ul>   | s: arches, loops and whorls, and their unique  | <ul> <li>ELL Strategies</li> <li>Peer / Adult Support</li> <li>Model reading and demonstration</li> <li>Visual Aids / Graphics</li> <li>Highlight text</li> <li>Comprehension check</li> <li>Graphic organizers</li> <li>Cooperative learning groups</li> <li>Build background knowledge</li> <li>Introduce essential vocabulary</li> <li>Cloze reading activities</li> <li>Think aloud / Summarize</li> </ul> |  |  |
| <ul> <li>CTE Standards and Benchmarks:</li> <li>Identify the history, goals, and career opportunition. The student will be able to:</li> <li>Describe the parts and functions of the critical interpret ethics and professionalism in relation to the student will be able to:</li> <li>Apply standards of professionalism in the Discuss constitutional and criminal laws at the feet the student will be able to:</li> <li>Identify constitutional law as it applies to the student will be able to:</li> </ul> | minal justice system.  the criminal justice system.  criminal justice system.  leral, state, and local levels. | ESE Strategies  Handouts / Study guides  Visual aids / Graphics  Graphic Organizers  Extended time  Think aloud  Peer / Adult Support  Tasks explained in small steps  Introduce essential vocabulary  Cloze reading activities  |  |  |
| <ol> <li>Describe criminal law procedures in Florida</li> <li>Identify misdemeanor and felony criminal</li> <li>Describe Federal, State, and local law enfo</li> </ol>  | law procedures in Florida.   | <ul> <li>Cooperative learning groups</li> <li>Model reading and demonstration</li> </ul>   |  |  |

# Describe court systems and trial processes 1. Describe the pretrial, trial, and post-trial processes.

2. Describe the roles and responsibilities of the people involved in the trial processes.

Utilize personal, interpersonal, and communication skills. The student will be able to:

- 1. Follow directions.
- 2. Display integrity, loyalty, dependability, and punctuality.
- 3. Identify and apply strategies for showing compassion and working well with others.
- 4. Identify and plan solutions for situations that require crisis management and conflict resolution.

#### Demonstrate employability skills.

3. Identify the interpersonal skills, work habits, and ethics necessary for ongoing employment in an environment of human diversity.

#### **Career & Technical Education: Career Ready Practices**

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

- 1. Act as a responsible and contributing citizen and employee.
- 2. Apply appropriate academic and technical skills.
- 3. Attend to personal health and financial well-being.
- 4. Communicate clearly, effectively and with reason.
- 5. Consider the environmental, social and economic impacts of decisions.
- 6. Demonstrate creativity and innovation.
- 7. Employ valid and reliable research strategies.
- 8. Utilize critical thinking to make sense of problems and persevere in solving them.
- 9. Model integrity, ethical leadership and effective management.
- 10. Plan education and career path aligned to personal goals.
- 11. Use technology to enhance productivity.
- 12. Work productively in teams while using cultural/global competence.

### **Advanced Learner Strategies**

- Enrichment activities
- Self-directed learning
- Advanced books and professional journals
- Independent reading and writing choices
- Project based learning
- Debate
- Present a speech
- Interview professionals in career field of interest

#### **College and Career Readiness**

- Career One Stop Career exploration
- Guest Speakers
- Career Fairs
- Presentations to business partners
- Mock Interviews
- Resumes
- Cover Letters
- Internships
- Guest Presentations
- Work Site Visits
- Teen Court Program
- Mock Trials

| Academic Vocabulary:   |   | Resources:  Textbook: Criminal Justice in Action   |
|--|---|--|
| Arches Loops Whorls Delta Latent Visible Ducts Furrows   | Minutiae Friction Ridge Epidermis Dermis Bifurcation Fingertips Scar Expert               | The Core, 9th Edition  Teacher made PowerPoint  Study Guides and Outline  Graphic Organizers  Cloze Reading Activities  FBI Fingerprint cards  Introduction to Fingerprints video  |
| Content Specific Vocabulary: Latent Fingerprint Plastic Fingerprint Patent Fingerprint IAFIS LiveScan Palm Print | Fingerprint Impression Foot Print Impression Dactyloscopy Inked Print Known Print Booking | Assessment:  Multiple-Choice (Kahoot)  Summative Assessment (Solve Crime Formative Assessment (Classify Performance Tasks (Fingerprints) Collaborative Formative Assessment Culminating Project (Solve Crime 2) Check for Understanding Learning Scale and Exit Slip |
|  | Learning Goal Rubric  |  |

|           | Learning Goal Rubric   |
|-----------|--|
| Score 4.0 | <ul> <li>The student is able to analyze their own fingerprint impressions and classify the patterns as arches, loops and whorls. The<br/>student is able to calculate the prevalence of each classification.</li> </ul>      |
|           | <ul> <li>The student is able to analyze fingerprint patterns from known sources of fingerprint impressions and compare them to<br/>fingerprint impressions from an unknown suspect by comparing minutiae details.</li> </ul> |
|           | • The student is able to compare and evaluate fingerprint impressions to determine whether they are from the same source.  |
| Score 3.0 | The student is able to identify and explain the three classifications of fingerprint patterns: arches, loops and whorls, from their own fingerprint impressions.   |
| Score 2.0 | The student is able to define the three classifications of fingerprint patterns including arches, loops and whorls.  |
| Score 1.0 | With help, the student has partial success in identifying the three classifications of fingerprint patterns including arches, loops and whorls from fingerprint impressions.   |
| ScoreOO   | • Even with help, the student has no success in identifying the three classifications of fingerprint patterns including arches, loops  |

and whorls.

## Scale for all constructed response answers (Patterned on Marzano's Proficiency Scales)

| Score 4.0 | In addition to Score 3.0, in-depth inferences and applications that exceed the concepts or reasoning processes that were provided during instruction. |   |  |  |  |
|-----------|---|---|--|--|--|
|           | 3.5   | In addition to score 3.0 performance, in-depth inferences and applications with partial success.                                  |  |  |  |
|           | In the student response, ALL of the following is in place:  |   |  |  |  |
|           | •   | Demonstrate accuracy in response.   |  |  |  |
|           | •   | Demonstrate thoroughness in response.   |  |  |  |
| core 3.0  | •   | Demonstrate reasoning in response.  |  |  |  |
|           | •   | Write clearly and coherently in response.   |  |  |  |
|           | There are no major errors or omissions.   |   |  |  |  |
|           | 2.5   | No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.                                      |  |  |  |
|           | In the  | student response, at least TWO of the following is in place:  |  |  |  |
|           | •   | Demonstrate accuracy in response.   |  |  |  |
|           | •   | Demonstrate thoroughness in response.   |  |  |  |
| core 2.0  | •   | Write clearly and coherently in response.   |  |  |  |
|           | There may be an error or omission.  |   |  |  |  |
|           | 1.5   | Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content.                                    |  |  |  |
| Score 1.0 |   | With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes. |  |  |  |

#### What Students will Know, Understand, and Do!

#### What students will **Know**:

Students will know that fingerprints are unique and that no two people share the same fingerprint patterns.

Students will know the characteristics of fingerprints based on their visual pattern.

Students will know the impressions from fingerprints are formed by the pattern of ridges on the surface of the skin.

Students will know the definition of friction ridges as the raised portions of the skin on the palms of the hands and soles of the feet.

Students will know the three specific classes for the visual patterns of fingerprints as arches, loops, and whorls and will identify the characteristics of each.

Students will know the definition of dactyloscopy as the study of fingerprint identification.

Students will know occupations that require fingerprinting by law as those involving children, the elderly, the disabled, law enforcement, medical and dental professionals, adoptive and foster parents, and military personnel.

Students will know the name of the database maintained by the Federal Bureau of Investigation (FBI) that serves as a repository of criminal history information including fingerprints as the Integrated Automated Fingerprint Identification System (IAFIS).

Students will know the definition of Livescan as the inkless, electronic means of capturing fingerprints in a digitized format which then transmits the prints to the State Police and/or the FBI.

#### What students will **Understand**:

Students will understand that fingerprinting is a form of unique personal identification that utilizes a refined methodology that is scientifically proven in practice and accepted in courts of law.

Student will understand that the criminal justice system utilizes a repository shared with the FBI to store and compare fingerprints for both criminal and civil purposes.

Students will understand that individuals leave fingerprints or impressions on everything they touch with any pressure.

Students will understand how to analyze fingerprints to determine a person's identity by observing the arches, loops and whorls within those fingerprint impressions.

Students will understand how to compare and contrast fingerprint patterns to determine the identity of the unknown impression.

Students will understand the process for taking fingerprints for criminal and employment purposes using black ink pads and FBI fingerprint cards.

Students will understand that current fingerprinting technology utilizes Livescan to capture fingerprint impressions in a digitized format that is then transmitted to law enforcement agencies.

Students will understand that fingerprinting is a prerequisite for job entry in to the criminal iustice system.

Students will understand the proper techniques for rolling the fingerprints of another individual and correctly transfer the impression on the fingerprint card.

#### What students will **Do**:

Students will be able to demonstrate the proper technique for rolling the fingerprints of another individual and correctly transfer the impressions on the fingerprint card.

Students will be able to distinguish between the three specific classes for the visual patterns of fingerprints identifying the arches, loops and whorls and their characteristics.

Students will be able to analyze and identify the three classes of fingerprint patterns from fingerprints impressions.

Students will be able to analyze fingerprint impressions to determine the identity of an unknown person after comparing the impression to the impressions of known individuals.

Students will be able to complete the FBI Fingerprint card with their demographic information and their fingerprint impressions placed in the appropriate areas of the card.

#### **Essential Questions:**

- Can I describe the roles and responsibilities of the courtroom work group in the trial process as it relates to fingerprinting suspects in court?
- Can I describe the criminal law procedures in Florida related to fingerprinting suspects at the time of booking and upon and upon conviction for a felony at sentencing?
- Can I identify the three classes of fingerprint patterns and describe their unique characteristics?
- Can I name and identify minutiae details in fingerprint impressions?
- Can I demonstrate the proper technique for rolling the fingerprints of another individual and transfer the impressions on an FBI fingerprint card?
- Can I analyze and compare fingerprint impressions to determine the identity of the person from the unknown fingerprint with known fingerprints?
- Can I complete the FBI Fingerprint card with my demographic information and my fingerprint impressions in the appropriate areas of the card?

#### **Materials Needed**

- FBI Fingerprint Cards
- Inkless Fingerprint Pads
- Fingerprint Holders
- Magnifying Glasses
- Student Lesson Planning Sheet
- Fingerprint Analysis Sheet
- Video: How to Roll Fingerprints
- Fingerprint Power Point
- Wanted for Questioning Poster
- Fingerprint Evidence
- List of Instructions for each team.
- Baby Wipes

#### **Instructional Strategies/Activities:**

- Warm up activity: Kahoot Review of Fingerprints. Students will respond individually to an interactive educational response system to review the history, science, classification, and FBI repository database of fingerprints.
- Instructor will review the answers to the Kahoot Review questions with students and check for understanding.
- Lesson begins with a review of Florida laws and procedures regarding the collection of fingerprints at the time of booking and sentencing for felony and misdemeanor convictions.
- Review the unit vocabulary terms: friction ridges, arches, loops, whorls, dactyloscopy, IAFIS, Livescan.
- Instructor checks for understanding using the learning scale.
- Instructor assigns teams of three students the task of rolling fingerprints for each group member. Students transfer their fingerprint impressions onto the FBI fingerprint card.
- Teams are assigned a role while rolling fingerprints. Team members will switch roles after each student is fingerprinted.
- Roles include: Sentry to monitor the rolling technique and to hold the ink pad and fingerprint card still during the process. Technician to roll the fingerprints using the proper technique. Applicant who is having their fingerprints rolled on the FBI fingerprint card.
- Instructor circulates the room making inquiries of students about the methodologies being used and checking for understanding.

- Students will analyze their own fingerprints and record the number of arches, loops and whorls are in the set of impressions.
- Statistical data will be recorded to determine the prevalence of loops, arches and whorls among the class and between male and female students. The data will be presented to the class.
- Students will then be presented with a crime mystery for which they must compare fingerprints of known individuals to the impression left by the suspect. Team members will collaborate on this assignment to determine the identity of the suspect.
- Students are given an exit slip to write down the most important thing they learned during the activity. Students are also asked to rate their understanding of the lesson according to the learning scale.

#### **Planned Instructional Questions During Lesson:**

Creating: What other objects could provide impressions that could be analyzed and compared to solve crimes?

Con you think of other noncriminal situations where fingerprint impressions would be useful?

**Evaluating:** What was your thought process when you compared known fingerprint impressions to an impression of an unknown person?

Did you have enough information to verify the identity of the person from the unknown fingerprint? Explain your reasoning?

Analyzing: How do you use the classification of fingerprint patterns to establish the identity of an individual from a fingerprint impression?

How do you differentiate between the arches, loops, and whorls of similar fingerprint impressions?

Applying: How do you identify the visual patterns of fingerprint impressions?

How can you analyze impressions left from palms and feet? Explain your reasoning.

Understanding: How are you going to determine the identity of the person from a fingerprint impression?

Are you having difficulty in deciding the identity of the person from a fingerprint impression?

Remembering: What are the three specific classes of fingerprint patterns?

What other details can be determined from a fingerprint impression?

Knowledge: What is the part of the skin that forms the fingerprint patterns that appear when an individual touches a surface?

#### **Deliberate Practice Elements**

## 1. Planning Standards-Based Lessons/Units

Focus Statement: Using established content standards, the teacher plans rigorous units with learning targets embedded within a performance scale that demonstrates a progression of learning.

#### **Evidence:**

- Plans exhibit a focus on the essential standards
- Plans identify learning targets aligned to the rigor of required standards
- Plans illustrate how learning will scaffold from an understanding of foundational content to application of information in authentic ways
- Plans include a scale that builds a progression of knowledge from simple to complex
- Lesson plans align to grade level standards with targets and use a performance scale
- Plans identify specific instructional strategies appropriate for the learning target
- Lessons are planned with teachable chunks of content
- Plans regularly include opportunities for students to build their vocabularies through a mix of reading, direct instruction, peer
- conversation, and writing
- Plans include coherent sequences of questions and tasks that require students to draw evidence from texts to support analyses,
- reflections, research and stronger engagement with texts
- When appropriate, plans illustrate how EL strategies are addressed in the classroom
- When appropriate, plans illustrate how Individualized Education Plans (IEPs)/personal learning plans are addressed in the classroom
- Planned and completed student assignments/work require practice with complex text and its academic language
- Planned and completed student assignments/work demonstrate grounding in real-world application
- Plans identify how to use traditional resources such as text books, manipulatives, primary source materials, etc. at the appropriate level
- of text complexity to implement the unit or lesson plan
- Planned student assignments/work require reasoning and explaining, modeling and using tools, seeing structure and generalizing of
- mathematics
- Productive changes are made to lesson plans in response to formative assessment (monitoring)
- Plans specify accommodations and/or adaptations for individual EL or groups of students
- Begin and end the lesson with focus on the learning target to indicate the critical content of the lesson
- Identify and accurately teach critical content
- Summarize critical content
- Use Graphic organizers
- Use K-W-Lstrategy or variation
- Technology response systems
- Question all students

- Probe a few or individual students
- Use appropriate wait time
- Student conversation in groups focus on critical content
- Discuss and answer questions about the new content in groups
- Ask students to explain the relationship of learning targets to critical content in the scale
- Make predictions about new content
- Use informal strategies to engage group members in active processing: Predictions, Associations, Paraphrasing, Verbal summarizing,
- Questioning.
- Present situations or problems that involve analyzing how one idea relates to ideas that were not explicitly taught
- Ask questions that stimulate student thinking beyond what is directly stated to require students to make nontrivial inferences based on
- textual evidence.
- Provide evidence and support for elaborations.
- Entrance/exit tickets

#### Students will be able to:

- Students will work in groups with an organized purpose. Students will rotate assigned roles to perform different tasks during the fingerprinting process and crime-solving activity.
- Students will collaborate on performing proper fingerprinting technique while rolling each other's fingerprints on an FBI fingerprint card in accordance with criminal justice standards.
- Students will exhibit awareness of the power of their own and other's perceptions and interpretations during the fingerprint analysis and criminal investigation activity.
- Students will calculate the prevalence of the classifications of their fingerprint impressions among their peers using mathematical
- calculations to confirm scientific statistics about the prevalence of arches, loops, and whorls among the general population.
- Students will actively ask and answer questions about proper fingerprint rolling and fingerprint analysis to achieve mastery of the learning goal.
- Teams of students will collaborate on solutions to a criminal investigation by analyzing evidence, comparing fingerprints, and identifying a suspect for a given crime.
- Students will explain individual/or group thinking about fingerprint rolling, fingerprint analysis, and the reliability of fingerprint impressions used for the positive identification of individuals in the criminal justice system.
- Students will avoid negative thinking and engage with their peers throughout the fingerprint rolling and analysis activity.
- Students will elaborate on the evidence and findings to provide real world examples of noncriminal uses for fingerprint impressions.

## **Organizing Students to Interact with Content**

Focus Statement: Teacher organizes students into appropriate groups to facilitate the learning of content.

#### **Evidence:**

- Establish routines for student grouping and interaction for the expressed purpose of processing content.
- Provide guidance regarding group interactions and critiquing the reasoning of others.
- Utilize assignments or tasks at the appropriate taxonomy level of content.
- Provide guidance on one or more conative skills:
- Becoming aware of the power of interpretations
- Avoiding negative thinking
- Taking various perspectives
- Interacting responsibly
- Handling controversy and conflict resolution
- Work within groups with an organized purpose.
- Explain individual student and/or group thinking about the content
- Interact responsibly and respectfully critique the reasoning of others
- Generate clarifying questions about the content
- Take responsibility for the learning of peers

#### Students will be able to:

- Students will work in groups with an organized purpose. Students will rotate assigned roles to perform relevant tasks during the
- fingerprinting process and crime-solving activity.
- Students will collaborate on performing proper fingerprinting techniques while rolling each other's fingerprints on an FBI fingerprint
- Card in accordance with criminal justice standards.
- Students will exhibit awareness of the power of their own and other's perceptions and interpretations during the fingerprint analysis and criminal investigation activity.
- Teams of students will collaborate on solutions to a criminal investigation by analyzing evidence, comparing fingerprints, and identifying a suspect for a given crime.
- Students will explain individual/or group thinking about fingerprint rolling, fingerprint analysis, and the reliability of fingerprint impressions used for the positive identification of individuals in the criminal justice system.
- Students will avoid negative thinking and engage with their peers throughout the fingerprint rolling and analysis activity.
- Students will elaborate on the evidence and findings to provide real world examples of noncriminal uses for fingerprint impressions.
- Students will take responsibility for providing support for other students in their learning.
- Students will be open to various perspectives and interact responsibly with their peers.

## **Post Reflection**

Instructor will write a reflection about her observations and perceptions of the lesson and the intended and unintended outcomes.