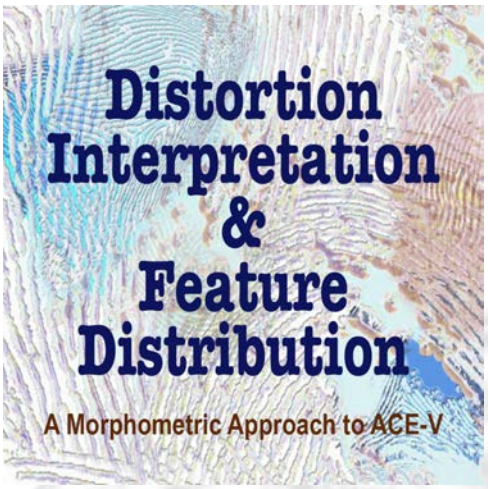
Evolve Forensics
Emerge with Knowledge

P.O. Box 232196, Las Vegas, NV 89105
www.EvolveForensics.com

On-Site Training



Date: September 12 - 16, 2022

Time: 0800 - 1700 Monday - Thursday
0800 - 1200 Friday

Cost: $650.00

IAI approved training hours for Latent Print & Tenprint Certification and Recertification

Location: Mesa Police Department
Fiesta Substation
1010 W. Grove Ave.
Mesa, AZ 85210

Instructor: Alice White
Email: Alice@EvolveForensics.com
Mobile: 702.769.9469
Link to Register: www.EvolveForensics.com/schedule/

Course Description

Landmark-based morphometrics are quantitative methods used by scientists to study form, and variation in form, within plant and animal species. This is essentially the same method used, albeit more qualitatively, during the examination of friction ridge impressions. A key difference for friction ridge examiners is that this method must be applied along two dimensions: 1) distribution of friction ridge features within the human population (inter-source variation) and 2) variation in the recording of friction ridge skin from the same person (intra-source variation). Inter-source variation establishes the diagnosticity of the feature for establishing search parameters and determining identity. Intra-source variation establishes whether the attributes of a feature are within tolerance for having come from the same source skin.

This **4 ½ day workshop**, taught by Alice White, will link together the biological aspects of the skin ("morpho" of morphometric) with the geometry of the impressions of the skin ("metric" of morphometric). The estimated distribution of the features within the population will be evaluated using published research and exploring the degree of symmetry among twins and within individuals (bilateral symmetry). Assessing variation in appearance will take place along two lines of inquiry 1) skin variation due to time (e.g., aging, injury, disease) and 2) variation in appearance due to distortion during the recording of the skin on a surface.

This workshop includes the content (including skin distortion films) from Alice's flagship course, Analysis of Distortion in Latent Prints.

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On-Site Training

Distortion Interpretation & Feature Distribution: A Morphometric Approach to ACE-V

Daily Syllabus & Learning Outcomes

Day 1 Syllabus

0800 - 0900	Course Overview and Class Introductions
0900 - 1000	Similarities and Differences in Friction Ridge Impressions
1000 - 1100	Introduction to Friction Ridge Features
1100 - 1200	Landmark-Based Morphometrics and Friction Ridge Features
1200 - 1300	*Lunch*
1300 - 1400	Search Diagnosticity and Source Diagnosticity
1400 - 1500	Attributes and Diagnosticity of Shape
1500 - 1600	Attributes and Diagnosticity of Regular Creases
1600 - 1700	Attributes and Diagnosticity of Irregular Creases

Day 1 Learning Outcomes

1.1 The attendee will be able to describe how similarities and differences affect the comparison of friction ridge impressions.

1.2 The attendee will be able to list sources of differences in friction ridge impressions from the same source.

1.3 The attendee will be able to indicate sources of similarities in friction ridge impressions from different sources.

1.4 The attendee will be able to describe how landmark-based morphometrics can be applied to friction ridge impressions.

1.5 The attendee will be able to define search diagnosticity and source diagnosticity.

1.6 The attendee will be able to describe the relationship between search diagnosticity and source diagnosticity.

1.7 The attendee will be able to describe the attributes of shape and the diagnosticity of shape.

1.8 The attendee will be able to describe the attributes of regular creases and the diagnosticity of regular creases.

1.9 The attendee will be able to describe the attributes of irregular creases and the diagnosticity of irregular creases.

1.10 The attendee will compare and contrast the regular and irregular creases of twins and opposite hands of the same person.

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Daily Syllabus & Learning Outcomes

Day 2 Syllabus

0800 - 0900	Attributes and Diagnosticity of Patterns
0900 - 1000	Attributes and Diagnosticity of Ridge Flows
1000 - 1100	Attributes and Diagnosticity of Ridges
1100 - 1200	Attributes and Diagnosticity of Minutiae
1200 - 1300	*Lunch*
1300 - 1400	Attributes and Diagnosticity of Incipient Ridges
1400 - 1500	Attributes and Diagnosticity of Wrinkles
1500 - 1600	Attributes and Diagnosticity of Scars
1600 - 1700	Attributes and Diagnosticity of Unstable Features

Day 2 Learning Outcomes

2.1 The attendee will be able to describe the attributes of patterns and the diagnosticity of patterns.

2.2 The attendee will be able to describe the attributes of ridge flows and the diagnosticity of ridge flows.

2.3 The attendee will compare and contrast the patterns and ridge flows of twins and opposite hands of the same person.

2.4 The attendee will be able to describe the attributes of ridges and factors affecting the diagnosticity of ridges.

2.5 The attendee will be able to describe the attributes of minutiae and factors affecting the diagnosticity of minutiae.

2.6 The attendee will be able to describe the attributes of incipient ridges and the diagnosticity of incipient ridges.

2.7 The attendee will be able to describe the attributes of wrinkles and the diagnosticity of wrinkles.

2.8 The attendee will be able to describe the attributes of scars and the diagnosticity of scars.

2.9 The attendee will be able to describe the attributes of unstable features and the diagnosticity of unstable features.

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Daily Syllabus & Learning Outcomes

Day 3 Syllabus

0800 - 0900	Introduction to Distortion Factors
0900 - 1000	Effects of Adolescent Growth
1000 - 1100	Effects of Aging
1100 - 1200	Effects of Wound Healing
1200 - 1300	*Lunch*
1300 - 1400	Effects of Hand Flexion and Adduction/Abduction of Digits
1400 - 1500	Effects of Angle of Contact
1500 - 1600	Effects of Deposition Pressure
1600 - 1700	Effects of Shearing Stress and Torque

Day 3 Learning Outcomes

3.1 The attendee will be able to describe the two main categories of variation in appearance between two friction ridge impressions from the same source.

3.2 The attendee will be able to describe the effects of adolescent growth on the friction ridge skin.

3.3 The attendee will be able to describe the effects of aging on the friction ridge skin.

3.4 The attendee will be able to describe the effects of wound healing on the friction ridge skin.

3.5 The attendee will be able to describe how the recording of friction ridge skin features can be affected by hand flexion or the adduction/abduction of the digits.

3.6 The attendee will be able to describe how the recording of friction ridge skin features can be affected by angle of contact.

3.7 The attendee will be able to describe how the recording of friction ridge skin features can be affected by deposition pressure.

3.8 The attendee will be able to describe how the recording of friction ridge skin features can be affected by shearing stress or torque.

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Daily Syllabus & Learning Outcomes

Day 4 Syllabus

0800 - 0900 Effects of Residue
0900 - 1000 Effects of Surface Conditions
1000 - 1100 Other Distortion Factors: Wobble, Overlays, & Double Taps
1100 - 1200 Application of a Morphometrics Approach to Examinations
1200 - 1300 Lunch
1300 - 1600 Group Distortion Films & Comparison Exercises
1600 - 1700 Course Quiz (covers content Days 1 - 4)

Day 4 Learning Outcomes

4.1 The attendee will be able to describe how the recording of friction ridge skin features can be affected by the residue on the friction ridge skin.
4.2 The attendee will be able to recognize conditions that increase the likelihood of tonal transitions within the ridges and furrows of an impression.
4.3 The attendee will be able to describe how the recording of friction ridge skin features can be affected by the nature of the surface touched by the hand/foot.
4.4 The attendee will be able to recognize wobble, overlays, and double touches.
4.5 The attendee will be able to apply a morphometric approach to the analysis and comparison of friction ridge impressions.
4,6 The attendee will participate in a group project filming various types of distortion.

Day 5 Syllabus

0800 - 0900 Presentation of Group Distortion Films
0900 - 1100 Review of Comparison Exercises
1100 - 1200 Certificates and Closing Remarks

Day 5 Learning Outcomes

5.1 The attendee will participate in the presentation of team distortion films.
5.2 The attendee will participate in the review of the comparison exercises.