UNDERSTANDING EXCLUSION AND SUFFICIENCY DECISIONS

COURSE DESCRIPTION

This 36-hour intermediate/advanced level course explores in depth and breadth the two concepts of “sufficiency” and “exclusion”. Examiners routinely struggle with these concepts and this course offers both theoretical and practical learning tools to better understand these concepts. The course will explore sufficiency for “value” determinations, as well as “sufficiency for conclusions”. The instructors will utilize current SWGFAST standards and ISO requirements when providing guidance on these topics. Students will explore several approaches for reducing erroneous exclusion rates and guidance is provided in the course for best practices based on the current research and literature available.

TARGET AUDIENCE

This course, the first of it’s kind in the friction ridge community, deals with the critical concepts of exclusion and sufficiency and will benefit examiners at all levels of experience and skill. However, to fully appreciate and grasp the complexity of the issues surrounding these difficult decisions – made by examiners every day – comparison experience is not only preferred but strongly recommended. Unit supervisors and quality managers are also encouraged to attend this course to gain a better understanding of the complexity of the current state of friction ridge examination.

DAILY SCHEDULE

<table>
<thead>
<tr>
<th>Day</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tbody>
<tr>
<td>Hour 1</td>
<td>Registration, introductions and pre-course survey</td>
<td>Assessing Quality, L3D and Other Features</td>
<td>Understanding Exclusion Decisions</td>
<td>Exercise 6 coupled with error rates</td>
<td>Research: Using AFIS as a tool to reduce erroneous exclusions</td>
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<td>Hour 2</td>
<td>Threshold versus Strategy</td>
<td>Exercise 3 – Using all levels, creases, etc.</td>
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<td>Strategies for Exclusion Decisions</td>
<td>Case Examples: Erroneous Exclusions</td>
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<td>Hour 3</td>
<td>Exercise 1 – Timed Comparisons</td>
<td>SWGFAST Standards</td>
<td>Exercise 5 – Exclusions and Tolerance</td>
<td>Exercise 7 – Strategies</td>
<td>Applying What You Have Learned to Practical Examples</td>
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<tr>
<td>Hour 4</td>
<td>Lunch</td>
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<td>Class Dismissed</td>
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<tr>
<td>Hour 5</td>
<td>Different Approaches to Sufficiency (Exercise 2A)</td>
<td>Exercise 4 – Sufficiency Graph Placement</td>
<td>Exercise 6 – Searching to Exclude</td>
<td>Exercise 7 – Strategies (continued)</td>
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<td>Hour 6</td>
<td>Exercise 2B – Recreation of Value</td>
<td>Policy Decisions, Science and Other Domains</td>
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<td>Hour 7</td>
<td>Exercise 2C – Approaches #1 and #2</td>
<td>Bayesian Approach to Sufficiency</td>
<td>Computing Error Rates</td>
<td>Exercise 7 – Strategies (continued)</td>
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<td>Hour 8</td>
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SHOULD BE ABLE TO PERFORM

After attending this course the student will:

* Understand how thresholds and strategies affect decision making
* Understand how utility function plays a role in decision making
* Understand the different approaches to determination “of value”
* Understand how agency policy will shape examiners’ approaches to sufficiency
* Understand how knowledge, ability, and experience can impact sufficiency decisions
* Understand how Bayes theory and utility function impact sufficiency decisions
* Understand how sufficiency is expressed in other (non-forensic) domains
* Understand what the “One Discrepancy Rule” is and its role (if any) in exclusion decisions
* Understand the different ways in which an ‘exclusion’ decision can be expressed
* Understand how error rates apply to conclusions
* Recognize the different ways that exclusions are conducted
* Understand methods and approaches to reduce erroneous exclusions

MUST BRING TO CLASS

Students should bring fingerprint magnifiers and ridge counters.

Please bring a calculator (smart phone or tablet calculator will be sufficient).

Dress is business casual as the course will be conducted in a professional environment and facility.
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PRE-REQUISITES

Comparison experience is strongly recommended.

RECOMMENDED READING


I.A.I. APPROVED TRAINING HOURS

This course provides 36 training hours and is approved for IAI Certification and re-certification.