Methods of Instruction – Advanced Training for Practical & Professional Law Enforcement Skills

OVERALL COURSE GOAL AND TRAINING OBJECTIVES

I. Overall Course Goal

A. Using pre-course directed study, in-class instruction, facilitated group work and analysis, case studies and practical application, you will learn about effective training methods and procedures that are well established in the scientific literature and how they might be incorporated into existing academy and/or agency in-service training programs.

B. At the end of this course, the successful student will have a fulsome understanding of how to identify critical training needs, and build and instruct a defendable, scientific-based training program to address the critical skills required. In addition, the course of instruction will include the development of realistic, verifiable, and defendable course training standards (CTS) which will guide future instruction, protect the agency and the trainer.

II. Measurable Training Objectives

A. Module 1 – Course Introduction & Contemporary Issues
At the end of this module, students will be able to:

1. Identify the 5 'Myths' that are common in police training
2. Describe the research-based foundation for each of the 5 myths
3. Define the difference between Performance Change and Learning
4. List the 4 key findings of the "Police Academy Training, Performance & Learning" study
5. State the implications of these findings and why they are drivers for change in LE training
6. Describe the difference between Block and Interleaved training and the related training implications
7. Articulate what 'Spacing' and the 'Spacing Effect' is as it relates to motor learning and instruction

B. Module 2 – Human Factors Introduction
At the end of this module, students will be able to:

1. Discuss what human factors are and why a basic understanding is critical for LE training design

2. Describe the FBI findings relating to the threat environment facing LE officers and how those impact officer training design:

    a. Physical attacks
    b. Weapons attacks
    c. Environmental considerations
3. Define Gaze Action Coupling and why this human factor is important to understand both subject and officer performance
4. List the research findings on trigger pull cadence and how this impacts officer training

C. Module 3 – Principles of Motor Skill & Motor Learning Acquisition
At the end of this module, students will be able to:
    1. List the types of motor muscle fibers and how they function
    2. Identify the three types of Motor Actions
    3. List the two types of motor skill environments
    4. Define what Motor Learning is and the two measures used to measure when it has occurred
    5. Describe the difference between a motor skill and motor learning
    6. State the 6 training conditions necessary for excellent motor learning to occur
    7. Articulate Hebb's Rule and why it is important for trainers
    8. List the difference between Whole and Part practice and when each should be considered
    9. Discuss the important considerations for the role of context in motor learning
    10. List the difference reaction times and the relationship to the start/stop processes
    11. Define the Psychological Refractory Period and why it's a critical training concept
    12. Describe Hicks Law and its implications
    13. Discuss the difference between Extinction, Spontaneous Recovery and Slip and Capture

D. Module 4 – Vision
At the end of this module, students will be able to:
    1. State the different types of vision and their role in motor performance
    2. Discuss the role of the ciliary muscle in vision and performance
    3. Describe the performance issues relating to object recognition processes
    4. Discuss the importance of low light contextual training
    5. State how visual reaction time can be improved and design training drills to enhance visual reaction time in students

E. Module 5 – Attention

At the end of this module, students will be able to:

1. List the 4 quadrants of attention and their roles
2. Define ‘Game Intelligence’ and why it is critical for great officer performance
3. Discuss the role of Selective Attention on officer performance
4. Describe Situational Awareness from a human factors-based perspective and how it impacts officer perception & decision-making
5. State the difference between ‘Bottom-Up’ and ‘Top-Down’ attention and the implications of each for officer performance
6. Discuss ‘Sensory Gating’ as it relates to officer perception and decision-making
7. Discuss the Colavita Visual Dominance Effect as it relates to officer perception and performance
8. Define the ‘Stetchenov Phenomenon’ and the relationship in officer training

F. Module 6A – Decision Making

At the end of this module, students will be able to:

1. Describe the 4 stages of memory
2. Define the two general memory types
3. State the difference between Episodic Memory and Semantic Memory
4. Discuss memory confabulation and state the implications for accuracy of officer memory
5. List the two different types of thinking systems and the implications for officer performance
6. State the relationship between heartrate and performance
7. Discuss the stress/arousal relationship and its impact on decision making
8. Articulate why context-based training is essential for developing great decision making for officers
9. Define cognitive dissonance and its role in poor officer performance and the training implications

G. Module 7 – Mirror Motor Neurons

At the end of this module, students will be able to:

1. Define what Mirror Motor Neurons (MMN) are
2. Discuss the role of MMN on performance
3. State the relationship between student motivation, MMN and motor learning
4. Describe the role of Motor Observational Learning in police training
5. List the implications that the role of MMN have for trainers
6. Identify how the use of videos in training can leverage the MMN system in motor learning

H. Module 8 - Feedback Methods and Learning

At the end of this module, students will be able to:

1. State the difference between Behavioral Training and Decision Training
2. Identify the 7 common components of a behavioral training structure
3. Identify the 7 common components of a decision training structure
4. Articulate the process to build a decision training framework in the LE training program

5. Describe the relationship between variable and random practice within the decision training framework
6. Define Bandwidth Feedback and how it should be used in the decision training framework for effective learning
7. State the importance of trainer questioning and the role it plays on student learning
8. Discuss the importance of video training/video modelling within the DT framework and why it enhances student learning
9. Describe the Constraints Led Approach to training and the 4 critical components for successful motor learning

I. Module 9 – Online & Offline Learning
At the end of this module, students will be able to:
1. State the difference between 'online' and 'offline' learning
2. Discuss the role of sleep-in motor learning
3. State considerations that could be used in scheduling and designing training to maximize the potential learning benefit from sleep
4. Identify the potential dangers that exhaustion plays on motor learning
5. Discuss the role of 'Booster' training sessions on learning

J. Module 10 – Exercise & Learning
At the end of this module, students will be able to:
1. State the three energy systems and implications for performance
2. Discuss the relationship between acute/high intensity exercise both before and after motor learning
3. Describe the role that acute/high intensity exercise plays in potentially reducing training injuries
4. Identify the importance of 'functional' context-relevant exercise and design exercises to leverage operational officer performance

K. Module 11 – Imagery & Learning
At the end of this module, students will be able to:
1. Define Imagery
2. Define 'motor priming' and why it is important for motor learning
3. State the research findings on the relationship between imagery and motor learning performance
4. State the 7 components of the PETTLEP model of guided imagery
5. Describe the critical components of PETTLEP imagery development for optimal training

L. Module 12 – Learning Interference
At the end of this module, students will be able to:
1. Define 'Contextual Interference' and how it is essential for motor learning
2. Discuss the difference in 'variation within skills' and 'variations between skills'
3. Identify the relationship between Random/Blocked and Constant/Variable training structures
4. Define 'Learning Interference' and how it can impair motor learning

III. Measurement Methodology

A. Facilitator Evaluation of Learning Objectives
The course facilitators will evaluate the student's attainment of the learning objectives in each module through the following processes:

1. Class Participation and Socratic Questioning
2. Group problem-based learning exercises
3. Student presentations in class
4. Memory retrieval and application exercises ('Think/Pair/Share', 'Just Two Things', 'Brain Dump')
5. Completion of Meta Cognition sheets
6. Final written examination