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| **Learning Environment,**  **Classroom Instruction &**  **Lesson Planning** | | | **Instructor I**  **Mod 2A** |
| **Delivery Method:**   * Live/In-Person * Instructor-Led | | **Students:**   * 24 Maximum   **Classroom Layout/Orientation:**   * Chevron Style | |
| Materials  * Dry erase board * Markers * Project Teaching Aids PowerPorint   **Handouts:**   * Mayer’s Principles Handout * Student Lesson Plans & Skill Sheets | | **Lesson Time:**   * 4 hours with breaks   **Student Attendance:** Required   * Please submit attendance roster to Program Coordinator | |
| **HOUSEKEEPING**   * Remind students to use their name tents   **Moodle/ Online Learning Check-In**   * Confirm with the class that all students have completed:   + Case Study 1   + Knowledge Check 1 | | | |
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| Lesson Plans | | | | 2A.1 |
| **Lesson Goal & Enduring Concepts**   * Orient Students to Lesson Plans and Learning Objectives including introducing them to their topic for their 5/10/20 min presentation. | | | | |
| **Objectives**   * Describe the purpose and benefits of lesson plans. * Students will understand the legal implications of using copyrighted materials in their lessons. * Discuss copyright laws and permissions involved with instructional materials. * Adapt a prepared lesson plan provided by the authority having jurisdiction. | | | | |
| DISCUSSION | | PURPOSES AND BENEFITS OF LESSON PLANS   |  | | --- | | **Instructor Note:** Lead a discussion about the importance of having a goal and a plan to achieve that goal. Why do we need a plan? | | | |
| ACTIVTY | | Assign 5/10/20 Minute Lesson Plans   |  | | --- | | **Instructor Note:** Discuss with PC/Captain method for assigning Lesson Plans. Use Student Lesson Plans to drive a guided discussion about the follow components. |   LESSON PLAN COMPONENTS   * Job or topic. * Prerequisites (not in NFPA 1041). * Time frame (not in NFPA 1041). * Level of instruction. * Behavioral objectives, performance objectives, or learning outcomes. * Instructional resources and materials needed. * References. * Lesson outline.   + Preparation step (motivation). Use motivational techniques to engage learners.   + Presentation step. Use student-centered presentation techniques to maintain engagement.   + Application step. Allow students to apply the knowledge and skill presented before evaluating them.   + Evaluation step * Lesson summary. * Evaluations. * Assignments. | | |
| DISCUSSION | | LEARNING OBJECTIVES   * Objectives are designed by Level II Instructors   + Describe what students should be able to do by the end of the lesson.   + Allow Level I instructors to modify and adapt the lesson to meet the needs of the student while still meeting the intent of the lesson. * Three components   + **Action**, performance, or behavior the *students* will do,   + **Conditions** under which the students will perform the action,   + **Standards** determining success or criteria for completion. | | |
| DISCUSSION | | IDENTIFICATION OF RESOURCES   * List of Materials   + Lesson plans should have a prepared list of materials, training aids, and props. * Learning Objectives   + You should also review the conditions portion of the learning objectives to determine if any additional resources are needed. * Resources must be requested.  |  | | --- | | **Instructor Note:** Students must request prop usage through Moodle. Discuss Student 5/10/20 minute topics and how to request those props.  Not all prop requests will be fulfilled but, one must be submitted per JPRs. | | | |
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| Teaching Aids | | 2A.2 |
| Lesson Goal  * Students will understand the advantages and limitations of audiovisual equipment and teaching aids and how to use lesson plans to select appropriate training aids that enhance learning.  Enduring Concept  * Teaching aids and props should enhance student learning; not take away from it. Ensure all props and aids assist in a specific student-centered function. | | |
| Objectives  * Describe the variety of teaching aids and instructional technology tools that an instructor may use in the learning environment. * Describe the cleaning, care, and maintenance of teaching aids. * Summarize the benefits of using teaching aids and props in the learning environment. * Relate the concept of cognitive load to the use of teaching aids. * Describe the use of structured exercises. | | |  |
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| DISCUSSION | BENEFITS OF TEACHING AIDS AND PROPS  **[ASK] What are the benefits of using teaching aids and props?**   * Enhance understanding. * Add interest. * Clarify, prove, or emphasize key points. * Enhance remembering * Organize ideas * Gain and maintain attention * Illustrate a process * Active learning / student-centered learning   GENERAL PRINCIPLES  **[ASK] Has anyone ever had to turn down the radio to read a street sign? What was happening there?**   * **Manage cognitive load**   + Use one prop at a time   + Display one step at a time   + Minimize complexity * **Transition techniques**   + Introduce just before use   + Emphasize the message not the prop   + Ensure visibility | |
| DISCUSSION | NONPROJECTED TEACHING AIDS   * Marker board / easel pad * Illustration or Diagram Displays * Duplicated Materials * Models * Recordings | |
| ACTIVITY | **PROJECTED TEACHING AIDS POWERPOINT**   * Instructional technology tools, demonstration devices, and selection criteria   + Use tech to solve an existing problem.   + Don’t choose tech and find a problem. * Advantages and limitations of AV equipment and teaching aids   + **Cognitive load** * Use of instructional media and teaching aids (Mayer’s Principles)   + Reduce extraneous load.     - Coherence     - Signaling     - Redundancy     - Space Connection     - Time Connection   + Manage essential processing.     - Segmenting     - Prepare     - Sensory Inputs   + Foster integration.     - Images.     - Voice.     - Multimedia.     - Personalization. | |
| DISCUSSION | SIMULATION  **[ASK] How do we measure simulations?**  Fidelity is comprised of:   * Scene: Does the training environment match the real world? * Scenario   + Is the Scenario Appropriate Level for Learners?   + **Novice/Beginner/Competent**   + Does the scenario align with objectives?   + Is the scenario logical and realistic?   + Does the scenario require students to apply their knowledge and skill? | |
| DISCUSSION | COPYRIGHT LAWS AND PERMISSIONS   |  | | --- | | **Instructor Notes:** Lead a discussion about the importance of copyright laws in protecting the creative processes that drive innovation. |   **[ASK] What is the purpose of having laws to prevent people from copying work?**  What types of work are copyrighted?   * Public Domain   + Specifically released into the public domain.   + Any work of the government.   + Expired copyrights. * Fair Use   + Copying of copyrighted work for “transformative” use.     - Criticism or parody     - News reporting     - Teaching     - Research   + Four factors     - The purpose and character of your use,     - The nature of the copyrighted work,     - The amount and substantiality of the portion taken, and     - The effect of the use upon the potential market.   + Have you added new expression or meaning?   + Did you add value by creating new information, new insights, or new understandings? * Model release   + Legal release signed by the subject of a photograph granting permission to publish the photograph in any form. * Types of Resources   + Books: single chapter   + Periodicals: single article   + Journals: single graph or excerpt   + Movies: short segment or scene   + Music: short clip (6 seconds or less)   + Graphic Art: single photo, painting, or graphic * Where to Get Resources   + Creative Commons   + Government Websites   Open Sources – Sources available in Moodle – | |

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| Classroom Environment | | 2A.3 |
| Lesson Goal  * Students will be able to adapt the classroom learning environment to support and enhance the learning experience.  Objectives  * Describe considerations for classroom learning environments. * Describe the use of structured exercises. * Set up a learning environment (classroom lab or outdoor site).   IFSTA – FESI Instructor I – Learning Environment – Page 89 | | |
| DISCUSSION | |  | | --- | | **Instructor Note:** Case Study #2 in Moodle Directly Aligns with this section. Students will be required to submit a writing prompt discussing how they would adjust a learning environment to promote active learning. |   CHARACTERISTICS OF EFFECTIVE LEARNING ENVIRONMENTS  **[ASK] What are some characteristics of an effective classroom?**   * Effective classrooms minimize extraneous cognitive load   + Seating   + Lighting   + Temperature   + Noise   + Working equipment   + Other amenities * Evaluate the learning environment   + Evaluate facilities for appropriateness | |
|  | SEATING ARRANGEMENTS   * Match seating to the classroom and activities   + Learners should face the focal point of the lesson   + Groups should be able to collaborate   + Forums should be able to see everyone else   + Work surfaces should allow note taking * Organize the learning environment   + Adapt the environment to your instruction as able   + Adapt your lesson to the environment as needed | |
|  | LIGHTING   * Low light decreases visual acuity * Bright light can cause eye strain * Dimmers allow adjustment of the light to suit activity type | |
|  | TEMPERATURE AND VENTILATION   * Schedule environmental control before the lesson   + Some buildings require time to bring rooms to temperature * If training outside, ensure students have all require gear to protect themselves from the elements. | |
|  | NOISE   * Echo   + Based on the size of the space and sound-absorptive qualities of the materials.   + Decrease echo by adding rugs, drapes, or sound insulation. * Machinery   + Schedule or location may determine the presence of noise.   + Try to turn off noisy machinery if able * PPE   + 70 decibels is the threshold of damage   + 90 decibels is the threshold of pain | |
|  | AUDIOVISUAL EQUIPMENT   * Ensure visibility.   + Size   + Keystone   + Brightness (lux)   + Test equipment     - Visual     - Sound     - Control     - Input | |
|  | OTHER LEARNING ENVIRONMENT CONSIDERATIONS   * SAFETY   + Exits   + Drills * Power * Internet * Coffee   Minimize distractions. | |
| Training Ground Environment | | 2A.4 |

# Lesson Goal

* Students will be able to select a safe training area suitable for the type of training being conducted.

# Objectives

* Describe considerations for training ground learning environments.

IFSTA – FESI Instructor I – Training Ground Environment – Page 96

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| DISCUSSION | CHARACTERISTICS OF EFFECTIVE TRAINING GROUNDS  What makes a training site effective?   * Access * Space * Equipment * Shelter * Capabilities |
| DISCUSSION | REMOTE SITES   * Locations   + Parking lots   + Construction sites   + Acquired structures   + Military reservations   + Airports   + Agriculture or Industrial sites   + Wildlands   + Vehicle salvage yards   + Parking garages   + Warehouses * Weather * Site considerations   + Terrain   + Site space   + Exposures   + Laws and Codes   + Water supply * Traffic * Noise * Lighting * Access/Egress |