DIVERSITY APPRENTICESHIP PROGRAM
TRAINING CURRICULUM OUTLINE

Module 1. DAP Training Introduction

Objectives: To introduce apprentices to training course.

Module 2. Apprentice Basic Training // Understanding Best Practices

Objectives: To have a full understanding the philosophy of museum best practices, what the common risks for collections are and how to assess risks of a specific object for handling and packing.

Training online course material:
- The Broad Art Handling Guidelines
- LACMA’s Guidelines for the Care and Handling of Collections
- To Wear or Not to Wear Gloves (video)
- DAP Module 2 Quiz

Module 3. 2-D Art Handling Principles

Objectives: To understand the various mediums of 2D works; the specific risks involved in handling 2D artwork; how to assess the condition of an 2D work; how to properly handle framed and unframed 2D works safely.

Training online course material:
- DAP – 2D Art Handling Procedures
- DAP – 2D Art Handling Procedures Quiz

Module 4. 3-D Art Handling Principles

Objectives: To understand the most common materials used with sculptures and objects; how to assess the condition of a 3D work; how to properly handle objects with and without equipment.

Training online course material:
- DAP – 3D Art Handling Procedures
- Installing Eva Hesse’s No Title, 1969 Whitney (video)
- DAP – 3D Art Handling Procedures Quiz
Module 5. Packing Methods and Materials

Objectives: To understand the various levels of packing; knowledge of the materials used for packing; have general knowledge of standard crate packing designs; have working knowledge of the standard methods of soft packing 2D & 3D works as well as unpacking and repacking of art and objects into existing exhibition crates

Training online course material:
- The Broad Materials Primer
- DAP – Packing Methods
- DAP Packing Methods and Materials Quiz

Module 6. Transport Methods

Objectives: to have a general knowledge of how collections are moved either internally or externally; understand how the mode of transportation will affect the methods, materials, and equipment used to move collections

Training online course materials:
- DAP – Artwork in Transit
- DAP – Handling Equipment
- DAP – Back Safety
- DAP Transport Methods Quiz

Section 7. Installation of Artwork

Objectives: gain a working understanding of how to install artwork in various wall layouts; knowledge of installation hardware and how to prepare and conduct an installation.

Training online course materials:
- DAP Installation of 2D Artworks
- DAP Installation Hardware
- Museum of Latin American Art – Art Installer Guide
- DAP Installation of Artwork Quiz

Section 8. The Installation Physical Process

Objectives: Physical practice of installation processes and procedures.

No online course materials required.
DIVERSITY APPRENTICESHIP PROGRAM
2019 TRAINING SCHEDULE

Wednesday, June 12th

Morning Session – 9:00am to 12:00pm (15-minute break at 10:15am)

Objectives:
To have a full understanding of museum best practices, what the common risks for collections are and how to assess risks of a specific object for handling and packing.

Training materials: Lecture, online course, follow up Q&A

- Introductions – George
- Litmos Login and Overview – George
- Online Training – Module 1: Introduction to Training Materials
- Online Training - Module 2: Apprentice Basic Training/Understanding Best Practices
  - Materials covered:
    ▪ The Broad Art Handling Guidelines
    ▪ LACMA’s Guidelines for the Care and Handling of Collections
    ▪ To Wear or Not to Wear Gloves (video)
    ▪ DAP Module 2 Quiz

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)

Objectives: To understand the various mediums of 2D works; the specific risks involved in handling 2D artwork; how to assess the condition of an 2D work; how to properly handle framed and unframed 2D works safely.

Training materials: Framed and unframed 2D works, cotton & nitrile gloves, painting carts with cardboard dividers, object carts; work tables

- Lecture, Group Discussions, and Questions from Module 2 (45 min.)
- Online Training – Module 3: 2D Art Handling
  - DAP 2D Art Handling Procedures
  - DAP 2D Art Handling Procedures Quiz
- Hands-on Training Exercise: Understanding the Physical Differences of Handling Various Types of 2D Material
- Hands-on Training Exercise: Handling and Moving Unframed Works on Paper
Thursday, June 13th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)

- Welcome – George
- DAP Timesheets – George
- Days Off/Sick Days in Payday – George
  - Hands-on Training Exercise: Handling and Moving Paintings

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)

- Online Training – Module 4 – 3D Art Handling
  - DAP – 3D Art Handling Procedures
  - Installing Eva Hesse’s No Title, 1969 Whitney (video)
  - DAP – 3D Art Handling Procedures Quiz
- Group Discussion on 3D Art Handling (30 min.) – Jack Williams
- Basic 3D Object Handling Lecture/Discussion – Jack Williams
- Hands-On Training Exercise: Handling 3D Objects by Hand

Friday, June 14th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)

- Welcome – George
- Online Training – Module 6: Transportation Methods
  - DAP – Artwork in Transit
  - DAP – Handling Equipment
  - DAP – Back Safety
  - DAP Transport Methods Quiz
- Lecture and Group Discussion: Back Safety – Jack Williams
- Hands-On Training Exercise: Internal Movement with Handling Equipment

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)

- Hands-On Training Exercise: Internal movement with handling equipment (above exercise continued from morning session).

Monday, June 17th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)

- Welcome – George
• Lecture and Group Discussion: Overview of Tools, Safety, and Uses – Jack Williams and Ernesto Ceja

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)

• Online Training: DAP Module 5: Packing Methods and Materials
  o The Broad Materials Primer
  o DAP – Packing Methods
  o DAP Packing Methods and Materials Quiz
• Hands-on Training Exercise – Soft Packing Methods and Materials, Part 1: 2D Works

Tuesday, June 18th

Morning Session
  • Grand Central Art Center – Back of House and Exhibition Tour

Lunch – 12:00pm – 1:00pm

Afternoon Session
  • Museum of Latin American Art – Back of House and Exhibition Tour

Wednesday, June 19th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
  • Welcome – George
  • Hands-On Training Exercise – Soft Packing methods and materials, Part 2: 3D Works

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)
  • Hands-On Training Exercise: Cavity Packing

Thursday, June 20th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
  • Welcome – George
  • Continue Soft Packing Methods and Materials

Lunch – 12:00pm – 1:00pm
Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)
  ● Online Training: Module 7: DAP Installation of 2D Artworks  
    o Installation of 2D Artworks  
    o DAP Installation Hardware  
    o Museum of Latin American Art – Art Installer Guide  
    o DAP Installation of Artwork Quiz  
  ● Continue Soft Packing Methods and Materials

Friday, June 21st

Morning Session
  ● Autry Museum of the American West – Back of House and Exhibition Tour

Lunch – 12:00pm – 1:00pm

Afternoon Session
  ● Cinnabar – Back of House Tour  
  ● Vincent Price Art Museum - Back of House and Exhibition Tour

Monday, June 24th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
  ● Welcome – George  
  ● Hands-On Training Exercise: Picture Hardware, Preparing the Artwork for Installation Hardware

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)
  ● Continue Installation Practice

Tuesday, June 25th

Morning Session
  ● California African American Museum – Back of house and exhibition tour

Lunch – 12:00pm – 1:00pm

Afternoon Session
  ● Mentors and Goals Session  
  ● Team Building Activities
Wednesday, June 26th
Woodshop Training with Robert Espinoza (The Broad)

Thursday, June 27th
Woodshop Training with Robert Espinoza (The Broad)

Friday, June 28th
Woodshop Training with Robert Espinoza (The Broad)

Monday, July 1st
Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
  ● Welcome – George
  ● Demo and Lecture: The Installation Toolbox

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)
  ● Hands-On Training Exercise: Installation of art using the centerline method

Tuesday, July 2nd
Morning Session
  ● The Broad – Back of House and Exhibition Tour

Lunch – 12:00pm – 1:00pm

Afternoon Session
  ● LACMA – Back of House and Exhibition Tour

Wednesday, July 3rd
Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
  ● Training exercise: Installation of art using the centerline method as a team
Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:00pm (15-minute break at 3:00pm)
● Demo and Lecture: Wall Anchors for heavy installations
● Training exercise: Installation of art using the marked location method/salon style

Thursday, July 4th

Federal Holiday

Friday, July 5th

Morning Session 9:00am – 12:00pm (15-minute break at 10:15am)
● Continue Installation Practice

Lunch – 12:00pm – 1:00pm

Afternoon session – 1:00pm – 5:30pm (15-minute break at 3:00pm)
● Continue Installation Practice
Module 3: 2-D Art Handling Principles

Training exercise: Understanding the physical differences of handling various types of 2D material

Materials: 4’x4’ sheet of premium weight printing paper, 4’x4’ sheet of standard matt board, a 4’x4’x 1/8” piece of foam core and a 4’x4’x 1/4” piece of corflute / corrugated plastic. Each of these materials are commonly used within the workplace but show a diversity in their structural makeup.

Techniques: Precautions for handling two-dimensional objects require astute observation and knowledge of structural elements of these objects. Many procedures and techniques for handling two-dimensional objects share a similar approach whether they are framed, unframed or handled with no support structure.

Each individual will need to pick up and move the 4’x4’ sheet from a flat table top to a vertical position then across a room, through a general passage door and place it again upon a flat top table. It is a simple exercise but will give the trainee the full effect of how a 2-D flat plane will act and how they can move it with or without extra support or additional staff to assist. Of course, the purpose of the exercise is not to bend, tear, rip or crease the 4’x4’ sheet of material.

Action: Four people in one room and four in the other taking turns moving the same three sheets back and forth. Once someone finishes their turn they stay in the drop off area. Trainers on both areas to help assist each person as needed.

Training exercise: Handling and moving unframed works on paper

To move several unframed works on paper from one table to the next.

Materials (total for two tables): paper samples approx. (2 each) 12 x 24, 24 x 36, and 36 x 48 (with backing board), (12) interleaving, (4) “art below“ signs

Techniques: picking up works on paper using a triangle and hands, using backing board for large works, proper handling of works in transit, interleaving, “art below“ signs
**Action**: Four people at one table and four at the other table. Two at a time, pick up and move the works to the other table. Then stay at that table. Next two do the same process. Trainers at both tables for assistance.

**Training Exercise: Handling and moving paintings**

**Materials**: sample paintings (framed and unframed), carts, cardboard dividers, foam blocks, blankets

**Demonstration**: proper handling of paintings (one or two people), framed and unframed handling, placing and securing paintings on a cart, two people moving a cart, placement on a floor with pads for installation

**Action 1**: Divide group up into four teams of two each, two teams at one location and two teams at another location. Each Team of two take a set of paintings from a stack and place them on a cart and secure down for movement. Then move the cart to the other location (through a path and doorway) and unpack the cart and secure stack at location. Trainers at both locations for assistance.

**Action 2**: Same format as above but one location down at the bottom of the loading dock area. This will require off loading at stairs and walking them down/up.

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**Module 4: 3-D Art Handling Principles**

**Training Exercise: Understanding the Physical Space of an Object/Training Exercise**

**Materials**: (1) 4’ x 4’ foam core sheet, (1) 4’ x 4’ x 3’ foam core box

**Demo**: The following is a basic training exercise that can be used when talking about the physical difference between two- and three-dimensional space and how it relates to handling objects. It is simple in its explanation, but the point of the exercise is to bridge the balance of your visual understanding with the physical space of an object by interpreting your body as an actual object to be moved. The goal is to have the student understand the physical space that an object occupies and what an object will encounter from its physical space outward.

**Training exercise: Handling 3D objects by hand**

**Materials**: 3D props, gloves, two tables
Action 1: each person will move a set of small objects from one table to the other using proper handling methods. Cardboard trays may be needed for some of them which requires additional support on the tray for the object.

Action 2: groups of two move chairs and table through doorway and passages, from one room to the next. Requires proper handling of furniture and navigating through bottleneck and obstacles.

Action 3: a group of four people with one trainer, the team will pick and move a large object (empty crate?). This exercise will require team work, following instructions, and lifting an object together. Once the object is on wheels, it will travel through obstacles so the team needs to navigate, be spotters and control the movement.

Action 4: once the two teams finish action 2, the team will then move the same object back without the direction of the trainer. One of the team members will have to become the lead. If they have issues, trainer will go over the details and prompt the team to problem solve, consider their options and come up with a solution.

Module 5: Packing Methods and Materials

2D & 3D artwork and objects for training; various soft packing materials (boxes, tissue, cardboard sheets, foam, liners, etc)

Tools for packing (knives, tape guns, drills, scissors, etc)

Safety training: drill, hammer, knives, scissors

Action: Discussion with trainers and group on the materials used for soft packing 2D and 3D works, show samples

Display and discussion reading the commonly used tools for soft packing (knives, tape gun etc.) and crates (drill)

Training exercise: Soft Packing methods and materials, Part 1: 2D works

Materials: cardboard, plastic, bubble tape

Demo of to construct the following:
  - Slip cases, Shadow boxes
  - Portfolio for unframe works on paper
  - Commercial bin, plastic wrap and cardboard dividers (example in warehouse?)
  - ID containers and labels
**Action:** teams of two to construct slip cases, shadow boxes, portfolios should allow enough time for each team to do several making sure each person goes through the process thoroughly.

**Training exercise: Soft Packing methods and materials, Part 2: 3D works**

Materials: boxes, tape, bubble, newsprint, tissue

**Demo on how to pack small 3D works using:**
- Book carton
- Dish Pack (china barrel)
- ID containers and labels

Action 1: all eight people pack small objects into a book carton as trainers observe and assist

Action 2: all eight people pack larger objects into a dish pack (china barrel)  
- With tissue, bubble, newsprint

Demo on how to pack a large object in a dish pack (or book carton) using foam yokes. (Show Foam core box examples) This will extend from the previous method of using bubble and newsprint in the box. Less materials and time.

**Training exercise: Inspection and reports**

Demonstration of how to measure, inspect and report conditions of an object or 2D work

**Materials:** eight props for inspection, measuring tape, inspection form and pencils

**Action:** Each apprentice will measure, inspect and report on the condition of two objects. Rotation of apprentices to the objects place onto two tables.

**Layout:** two apprentices on each side of two tables with four objects in the middle of each table. The apprentices across from each other with share the two objects in front of them for inspection.

**Discussion:** the group and trainer to discuss the exercise, how well were they were able to inspect an object, what to look for, etc. This process should reaffirm the basics of measuring and inspection reports.
Training exercise: Cavity packing

Materials: 3D props; five book cartons cut in half 6 x 12 x 18 in size with 1” Synflex foam at bottom and two 2” layers of Senflex foam for the cavity packing; Soft Tyvek; cotton twill

Tools: filet knives, box knife, markers and measuring tape

Demo: cavity packing an object in foam and using a soft Tyvek liner
- How to place a set of objects on the foam with 2” allowance on all sides
- How to safely mark your cavity
- Methods for cavity packing

Action: each person lays out and creates cavities for the following objects: measuring tape, box knife, sharpie, and one other object (if needed) Trainers will observe and assist when needed.

Module 6: Transport Methods

Training discussion: Back safety
Trainer to go over the most common cause of back injuries and the basics of how to lift loads safely by themselves or working with others.

Training exercise: securing cargo to the truck for transit.

Trainer to go over the basics of a fine art service truck (have truck in loading dock)
- Duties and responsibilities of the drivers
  - commercial driver requirements
  - rules of the road for trucks
- Air ride suspension
- Climate control unit
- Lift gate

Trainer to demo the proper methods of securing cargo in a truck
- Loading a truck: demo and practice of safe handling of loads
- Loading a truck: distribution of deliveries in the truck
- Loading a truck: distribution of size and weight
- Loading a truck: strapping in a load
Action 1: teams of two practice bringing crate onto truck and securing it using straps.

Action 2: teams of two unload crate and lower it down to street level using lift gate (Trainer will operate lift gate). Then take crate back up into the truck using lift gate.

Module 7: Installation of Art Work and

Module 8: The Installation Physical Process

Training materials: online course, demo and hand on practice

Objectives: gain a working understanding of how to install artwork in various wall layouts; knowledge of installation hardware and how to prepare and conduct an installation

Field trips: Various institutions for the purpose of observing installation process in museums, galleries as well as private collections.

Training exercise: Picture Hardware, Preparing the Artwork for Installation Hardware

Trainer Demo/display: Picture hardware and Picture hooks (anchors later in the week)

Action: Practice installing 1) D-rings, 2) wire loops, 3) wire to D-rings onto prop art work

Demo: Trainer goes through the various picture hook hardware and tools for install

The Installation Toolbox: hardware, tools, and wall repair materials
Picture hooks, Takiya hooks, hollow and solid wall anchors
Art Protection on the floor

Demo: Trainer shows how to do the layout of one piece using the centreline method

a. Measure the height of piece
b. Measure down to D-ring
c. Measure between D-rings
d. Explain why proper D-ring install relates to the accuracy of an install

Training exercise: Installation of art using the centerline method

Materials: picture hooks and install tools
**Action 1:** each person installs one piece using a 60” centreline method. Repat process using various size works and different picture hardware: d-rings, wire loops etc.

**Action 2:** each person installs two works with 4” allowance in between at a 60” centreline.

**Training exercise:** Installation of art using the centerline method as a team

**Materials:** picture hooks and install tools

**Action 1:** two people teams install three pieces using a 60” centreline method. One person measures the other install hooks.

**Action 2:** two people teams install a different set of three pieces using a 60” centreline method (teams exchange sets). Team reverses roles of who measures the who install hooks.

Note: this exercise allows them to work as a team and solve the complexity of installing a series of artworks

**Demo:** Installing an artwork using the marked location method. Trainer will demonstrate how to do the math for a piece marked in its bottom right hand corner on the wall.

**Training exercise:** Installation of art using the marked location method

**Action 1:** each person installs one artwork with at a marked location. Trainers will place tape mark on wall for each person.

**Action 2:** each person installs two pieces with a marked location and 4” allowance. Trainer to mark location.

**Wall Anchors for heavy installations**

**Demo:** Trainer goes through the various hollow and solid wall anchors noting the pros and cons of each as well as their allowable load capacities. Demo will also include install each hollow anchor type into table top wall, show how the anchors work on the front and back side of the drywall.

**Demo:** installing a metal cleat on the back of the art and on the table top wall using anchors
Training exercise: Installing hollow wall anchor types into drywall

**Materials:** Drills, plastic anchors, molly bolts, toggle bolts with plywood cleat (small)

**Action:** each person installs the various anchors in drywall
  - Selecting the right size drill bit
  - Drilling straight into drywall
  - Install the anchor securely

**Note:** toggle bolt should be installed with a plywood cleat (two people install together)

Training exercise: installing art using Takiya type hook system

**Materials:** Takiya hooks

**Demo:** Trainer explains when this type of hook is used, what type of fastener is used to the wall with the hook. Provide demonstration on installing one hook

**Action:** Teams of two install Takiya hooks for one art work

Training exercise: Installing art using wall anchors

**Materials:** anchors, two drills

**Action 1:** teams of two install cleat on the back of an artwork

**Action 2:** teams of two install one artwork with a cleat on the wall at 60” centerline
  - Team one installs one piece
  - Team two installs second piece next to piece one with 4” allowance

**Action 3:** Teams remove cleats and repair walls from nail holes and anchors.

Refresher on installing:
  - Repeat installation exercises for centreline and marked location methods.
  - Repeat cleat/anchor installation if time allows
  - Recap on any previous training if requested or needed.
Topics that can be covered in the onsite museum training relating to installation:

- **Power Operated Equipment:** Platforms Lifts, Scissors Lift and Forklifts
  safety procedures and protocols
  understanding the team’s role around this equipment

- **Lighting Specifications:** Light Levels & lighting Types / Museum Methods

- **Texts and Labels:** / Museum Methods

- **Wall Prep, Painting and Touch-up:** before and after / Museum Methods