AV-AIDS LAB

Standard Operating Procedure for Overhead Projector (OHP)

Purpose: This SOP outlines the proper use, handling, and maintenance of the Overhead Projector (OHP) to ensure its longevity and effective functioning in various settings.

1. General Guidelines

1.1 Authorized Users Only trained personnel or individuals with prior permission can operate the OHP. Ensure that users are familiar with the equipment's operation.

1.2 Sign-In Procedure Before using the OHP, users must sign in to the logbook to track the usage and ensure accountability.

2. Setup and Operation of the OHP

2.1 Before Turning On

1.   Place the OHP on a stable, flat surface, ensuring that it is at the right distance from the projection surface (screen or wall) for a clear image.

2.   Connect the OHP to a power source using a properly grounded outlet.

3.   Check that the OHP is free from dust, and the lenses are clean.

2.2 Operating the OHP

1.   Power On: Switch on the OHP by pressing the power button or flipping the power switch.

2.   Focus and Positioning: Adjust the position of the OHP so that the image is clearly projected onto the screen.

•   Use the focus knob to sharpen the image.

•   Adjust the height of the projection arm if necessary for optimal display.

3.   Place a transparent sheet (acetate sheet) with your presentation material onto the glass surface of the OHP.

•   Align the sheet properly to avoid distortion of the projected content.

4.   Use the OHP's built-in controls to adjust brightness and contrast as needed for the clearest possible display.

3. Handling Transparencies

3.1 Using Transparencies

•   Ensure that only proper transparency sheets (acetate sheets) are used on the OHP. Paper or non-transparent materials should not be used as they can damage the projector.

•   Do not place any heavy or sharp objects on the OHP's glass surface.

3.2 Marking on Transparencies

•   Use water-soluble markers or dry-erase pens to write or draw on the transparencies. Avoid permanent markers unless it is a reusable transparency.

4. Adjusting Image Quality

4.1 Image Focus

•   Use the focus knob located on the OHP to fine-tune the sharpness of the projected image. Rotate the knob until the edges of the image are clear.

4.2 Brightness and Contrast

•　　　　Adjust the brightness or lamp intensity as needed, especially in different lighting conditions. Reduce the room's ambient light for a clearer image if necessary.

4.3 Projection Size

•　　　　Adjust the distance between the OHP and the projection screen to control the size of the projected image.

•　　　　Make sure the projection is large enough for the audience to see but within the OHP's optical limits.

5. Shutting Down the OHP

5.1 Turning Off the OHP

1.　　　　Power off the OHP by pressing the power button or flipping the switch.

2.　　　　Allow the OHP's bulb to cool down before unplugging the device.

3.　　　　Disconnect the power cord from the electrical outlet once the OHP has cooled.

5.2 Storing the OHP

•　　　　After use, cover the OHP with a dust cover to protect it from dust and debris.

•　　　　Store the transparency sheets in a safe place for reuse.

6. Maintenance and Cleaning

6.1 Cleaning the OHP

1.　　　　Turn off the OHP and unplug it before cleaning.

2.　　　　Use a soft, dry cloth to clean the glass surface, mirrors, and lenses of the OHP.

3.　　　　If necessary, use a slightly damp cloth to remove stubborn dirt, but avoid using liquids directly on the glass or the projector's body.

6.2 Changing the Bulb

•　　　　Follow the manufacturer's instructions for changing the OHP bulb when necessary. Use the correct replacement bulb model.

•　　　　Always allow the OHP to cool before handling the bulb.

•　　　　Keep a record of when the bulb was last replaced.

6.3 Routine Maintenance

•　　　　Inspect the OHP regularly for any damage to the power cord or glass surface.

•　　　　Clean the mirrors and lenses monthly to ensure clear projection quality.

7. Troubleshooting

7.1 Common Issues and Solutions

•　　　　Image is blurry: Adjust the focus knob until the image becomes sharp. Ensure the transparency is flat on the glass surface.

•　　　　No projection/Light failure: Check if the OHP is plugged in and turned on. If the lamp does not work, replace the bulb if needed.

•　　　　Dim or poor image quality: Increase the brightness or reduce ambient light in the room. Clean the glass surface and lenses for a clearer image.

•　　　　Flickering light: This could be a sign of a failing bulb. Replace the bulb if flickering persists.

7.2 Reporting Malfunctions

•　　　　Report any equipment failure or malfunctions to the technical staff or supervisor immediately.

•　　　　Do not attempt to repair electrical faults without proper training.

8. Safety Procedures

8.1 Electrical Safety

•　　　　Always ensure the OHP is plugged into a properly grounded outlet.

- Never operate the OHP with a damaged power cord or plug.
- Disconnect the OHP from the power source when not in use.

8.2 Bulb Safety

- The OHP bulb can become very hot during use. Avoid touching the bulb immediately after turning off the OHP.
- Allow the OHP to cool down before storing or replacing the bulb.

8.3 Fire Safety

- Keep flammable materials away from the OHP during use, as the projector bulb generates significant heat.
- Familiarize yourself with the location of fire extinguishers and emergency exits.

9. User Responsibilities

9.1 Training

- Users must undergo basic training before operating the OHP. Proper training sessions will be conducted periodically.

9.2 Accountability

- Users are responsible for the condition of the OHP during their session. Any damage or issues should be reported immediately.
- Users are responsible for cleaning up and storing the OHP after use.

9.3 Cleanliness

- After use, ensure that the OHP and surrounding area are clean and free of dust, marks, or materials left behind.

10. Incident Reporting

10.1 Accidents or Damage

- Any damage to the OHP or any accidents during use must be reported immediately to the lab manager or supervisor.
- Complete an incident report detailing the nature of the damage or malfunction and any actions taken.