Inspecting Material for the Memory Lab

When a patron brings in material for lab, the material will be one or a combination of several formats:

- Film (slides, negatives)
- Photographic prints
- Documents (letters, newspaper clippings, etc.)
- Magnetic tape (VHS tapes)

All material brought in to the Memory Lab needs to be inspected by staff before it can be placed in any of the equipment. Staff will need to look for several key issues, and depending on the issue, the material may be ineligible for digitization.

Photographs and Documents

Mold

Mold will likely be the largest issue we face. Any moldy material is ineligible for digitization in the Memory Lab, as the spores can spread and we want to avoid transferring mold to other patrons’ material. Mold grows in the presence of high humidity and poor storage conditions. Refer to the photos later in the guide for examples of mold damage.

The following are all signs of mold:

- the presence of fuzzy growth, in nearly any hue
- stringy, white filaments stretching across porous surfaces
- evidence of past water damage
- strange spots or stains

Mildew will often accompany mold. The signs of mildew include:
• “Old book smell” – this odor is often caused by mildew, even if the mildew has been removed
• a thin haze, a patch of spots, or a powdery flaking layer, normally white, black, or grey on the surface of the book or paper

Items with these issues are ineligible for the memory lab. Evidence of water damage, however, is not an immediate disqualifier for use in the memory lab. If past water damage is present, but the material exhibits no other signs of mold or mildew, the material can be digitized in the lab. Mold can form on nearly any porous surface - letters, photographs, books, or posters. If a patron has one moldy item, all the items must be inspected for mold as mold can spread.

**Magnetic Tape**

Magnetic tape is the tape contained in VHS tapes and cassette tapes. This material has its own requirements for inspection.

1. Inspect the box the tape comes in for mold and water damage - if you find either of these things, the tape is most likely contaminated and will not be allowed for use in the memory lab. If you detect mold on the box or tape, as shown in the photos below, tell the patron the tape cannot be digitized and do not proceed.
2. As soon as the material is removed from its container, smell it and the container (yes, you read that right). If you detect a smell that can be described as "waxy," "dirty socks," or "astringent/pungent," the binder of the tape—the stuff holding the magnetic particles together—is most likely breaking down. This process is called hydrolysis, or sticky shed, and any tape with a strong odor like this cannot be digitized in the lab because the tape will leave magnetic particles as it breaks down, damaging the tape head—and the tape! Sticky shed will cause squeaking in the playback.

3. Inspect the tape on its hub through the video cassette windows. Look for crystalline deposits and mold on the outside edge of the tape (bottom left). Inform the patron that the tape needs to be cleaned before it can be used in the lab.
4. Also open the cassette access door and inspect the tape for intense creases, tears, mold, dirt, or visible sticky shed (above right where binder is missing). Sticky shed needs to be sent to a vendor for treatment. If there are any of these issues, the tape may not be digitized in the lab.

5. Inspect the tape housing for breakage- a broken tape housing means poor handling and also likely means damaged tape. All of these can damage the VCR. If the housing is damaged, the tape may not be digitized in the lab.

Film

Inspecting film, which includes slides and negatives, follows a sort of hybrid approach from the steps above. The material must be inspected for mold, mildew, and water damage as in photographs, but the smell test from the magnetic tape should also be employed. Most negatives and films that come to the lab will be acetate film, which will take on a vinegary smell as it breaks down. Once again, as soon as the material is removed from its container, smell it and the container for vinegar. If it is slightly vinegary, the material may be digitized. If it is a potent smell, it may not be used in the Lab.

Damaged Materials
Damaged Tape

Unfortunately, damage to tape and film can be a disqualifier for digitization in the memory lab. Broken videotape obviously can’t be allowed in the VCR, and VHS tapes with broken housing can’t be allowed in either.

Damaged Film and Photographs

Damaged material that goes on the flatbed scanner can be digitized as long as the extent of the damage is rips or wrinkles. Placing a ripped photo or negative on the scanner will not damage the scanner, but make sure the patron is aware of the limitations of the lab.

Additional Photos of Problem Tapes

This is a tape hub (the inside of the tape) with mold that needs to be sent to a vendor for mold remediation:
This is a tape that has some mold on the outside, but none can be seen on the inside. If the mold on the outside is cleaned using distilled water and a paper towel and let to dry, this can still be played in the Memory Lab.