Photo Arts 2 Winter Quarter 2010.2 Instructor: Joe Ziolkowski " Joe Z. " 20110107

Proof/Print Development

You Supply:	Photographic burning & do gear & aspirir	paper, negatives, variable contrast filters, dust brush, dging tools, tape, pencils, towels, tongs, protective n.
Check out during Lab:	<u>Meet in 7B-3150 Lab - "F" series darkrooms.</u> You will be using proofing frame, 4-blade easel, negative carrier, 50mm lens, 11 x 14 inch tray.	
Chemistry:	Developer: Stop Bath: Fixer:	Trepan 2000 1:2 at 70 ° or Dektol 1:2 at 70 °. F or D - 72 1:2 at 70 °F. 28% Acidic Acid 1.5:32 at 70 °F. Rapid Fix w/o hardener 1:7 at 70 °F.

BEFORE PRINTING.

Check the fixer at your station with hypo check or a film chip. If a film chip has not cleared in 3 minutes or double the time it takes a film chip to clear, do not exceed 10 minutes, see lab attendant to change fix. Remember to check fix occasionally while printing. If your developer is dark brown, it is exhausted and needs to be changed.

AVOID CONTAMINATION OF CHEMISTRY! IF SOMETHING GETS CONTAMINATED (E. G. DEVELOPER IN FIXER) TELL LAB ATTENDANT IMMEDIATELY!! USE GLOVES OR TONGS FOR YOUR HEALTH PROTECTION. ALWAYS WASH YOUR HANDS WELL AND DRY THEM WELL BETWEEN PRINTS. ASK QUESTIONS IF IN DOUBT, IT IS THE ONLY WAY TO LEARN!

Keeping your chemistry fresh will save your work and the work of your fellow students. **Prepare Chemistry:**

- Mix Trepan 2000 Paper Developer (1:2) mix one part developer to two parts water, or, D 72 Paper Developer (1:2) mix one part developer to two parts water or Dektol Developer (1:2) mix one part developer to two parts water.
- Use **Stop Bath** working solution in darkroom and return to gallon jug when finished. If you mix your own Stop Bath, use stock solution in darkrooms or mix a 28% Acidic Acid (1.5:32) mix one part stop bath to thirty two parts water.
- Fixer, , use stock solution in darkrooms or mix to manufacturer instruction. Remember, do not dump old fixer down drain. Put tongs with each tray of chemistry.

Preparing Enlarger for making Contact Prints:

Position enlarging lens in enlarger, put condenser into bottom slot for 35 mm format, put #2 filter on top of condenser, set proof frame on baseboard, turn timer switch to focus, open up the lens and adjust height of enlarger head so the light covers contact frame completely, turn timer switch to time.

Setting up to make a contact print using a contact frame.

Light Source:

Glass

Place proofing frame on baseboard and put an opaque sheet of board over glass exposing small portion of negatives and unexposed paper.

Make a TEST STRIP. Set time on timer at 2-3 seconds. Expose this section of paper for 2-3 seconds. Move board over to expose another section of paper. Repeat this a few times until all of paper is exposed. Remove paper from proof frame and process the paper.

When you can see the difference between two highlight areas, choose the time that gives you slight high light detail. Adjust the variable contrast filter to affect the shadow section of the print.

Evaluate time and contrast and make another test strip if necessary. Make a final print.

Preparing Enlarger for making Enlargements:

Position enlarging lens in enlarger, put condenser into bottom slot for 35 mm format, put #2 filter on top of condenser, put negative into holder, emulsion side down (dull side down) and 180 ° from normal setting (People would be head down, feet up when looking at negative in negative carrier), put easel on baseboard, turn timer switch to focus, open up the lens and adjust height of enlarger head so negative image is size desired on easel. Use a piece of photographic paper to focus, close down lens 2 stops and turn timer switch to to time. Place a fresh piece of unexposed photographic paper in easel. Make a test strip at 2-3 second intervals and develop paper.

- RC paper is processed for 1 minute.
- Fiber base paper is processed for 2 minutes.

Evaluate time and contrast and make another test strip if necessary. Check the focus and expose a whole sheet of paper at determined time and develop paper. Evaluate the whole image. Do you need to burn and dodge? Is the contrast correct? Make a final print. Do final wash, dry prints, and spot as needed.

Developing Exposed Photo Paper:

Developer: 1 minute for RC based paper.
 2 minutes for fiber based paper.

Agitate continuously for the first thirty seconds, then once every fifteen seconds until completion of time. Agitate by lifting print from tray, flipping over, and re-immersing.

A well exposed print will start to become visible in the shadow areas around 20 seconds into development.

- 2. Drain print near the end of the development time for 10-15 5 seconds by holding it by the corner.
- 3. Stop bath: 30 seconds. Agitate continuously.
- 4. Drain print for 15 seconds.
- 5. Fixer: 10 minutes total time. 2 minutes constant agitation.
 3 minutes additional time with intermittent agitation.
 DO NOT EXCEED TEN MINUTES TOTAL TIME. YOU CAN STAIN YOUR
 PRINTS AND IT EXHAUST THE CHEMISTRY FASTER.
 After 3 minutes, print may be taken out of fix, BUT RINSED IN WATER
 FIRST, placed in tray, and taken out in the white light for assessment.
 After viewing, return print to fixer and complete process.
 You cannot judge the quality of a print under the safe lights!
- 6. Drain print for 15 seconds.
- 7. Water Bath: 5 minutes plus. Prints are held here until printing session is finished and it is time to wash. Final prints should stay in this bath with water running for at least 5 minutes.

Washing prints after completing printing session.

During Lab Time, a Tray of Hypo Eliminator will be located near the archival washers.
8. Perma Wash or

(Hypo Eliminator):
Working solution.

2 Minutes for RC base photographic papers.
2 Minutes for single weight fiber base paper.
2 Minutes for double weight fiber base paper.

DO NOT PUT YOUR PRINTS IN HYPO ELIMINATOR THAT ALREADY HAS SOMEONE ELSE'S WORK IN IT! THIS WILL CONTAMINATE THEIR PRINTS AND YOU CAN MAKE PEOPLE FEEL A LITTLE UPSET!

Carry prints to wash area in a tray. Wait for an empty tray.

- 9. Drain Prints.
- 10. Final Wash: 15 minutes for all fiber base paper. DO NOT PLACE YOUR PRINTS IN A WASHER WHEN SOMEONE HAS PRINTS ALREADY WASHING.

Wait for an empty washer.

- 11. Transport your prints after washing them in a clean chemical free tray.
- 12. Drying RC Base Prints: Squeegee: To remove excess water if you are air drying and hang the prints with your clips to air dry. If you have a personal hair dryer, you can also use this to speed up the drying time.

Do Not Squeegee if you are using the RC print dryer. Feed in wet prints for this dryer. Minimum size 5 x 7 inches. Usually will be dry in only a few minutes.

- 13. Drying Fiber Base Prints: Take prints out of wash and place in a clean tray. Squeegee prints by holding them by a corner. BE CAREFUL NOT TO WRINKLE PRINTS! Place prints in BLOTTER BOOK, Emulsion side towards thick paper. You can air dry your prints by placing them face down on screen drying racks and allow them to dry flat.
- 14. Clean up work station, dry all equipment. DO NOT DUMP YOUR FIX CHEMISTRY. See lab rules or ask attendant for instructions.
- 15. TALK TO YOUR CLASS MATES AND REMEMBER, BE HAPPY! PHOTO IS FUN!