Art Photography
AP 9A Lab Facilities Handbook

Art Photography Department Website:
http://www.cabrillo.edu/academics/photography/

Program Co-Chairs:
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Photo Lab Technician:
Janet Fine – jafine@cabrillo.edu
Lab Phone Number: (831) 479-6467

College Information

Class Schedules: http://www.cabrillo.edu/home/schedules/index.html
Or, go to Building 100 for a printed schedule.

Registration: You must apply to the college first, and then you may enroll in classes.

Webreg: http://www.cabrillo.edu/services/webreg/index.html

Online Catalog: http://www.cabrillo.edu/home/programs/index.html
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Photography A.A. Degree: Program Description, Model Program for Art Photography</td>
<td>3</td>
</tr>
<tr>
<td>Art Studio A.A. Degree – Art Photography Option, Facilities, Courses, Career Possibilities</td>
<td>4</td>
</tr>
<tr>
<td>Art Photography Department Policies and Guidelines</td>
<td>4</td>
</tr>
<tr>
<td>Lab Materials Fee &amp; Open Lab Hours</td>
<td>5</td>
</tr>
<tr>
<td>“A” Lab – Darkroom 1 Facilities</td>
<td>6</td>
</tr>
<tr>
<td>General Policies and Guidelines</td>
<td>6–7</td>
</tr>
<tr>
<td>Check Out &amp; Check In Procedures for Lab Use and Borrowing Equipment</td>
<td>8</td>
</tr>
<tr>
<td>B&amp;W Film Processing: Lab Policies and Guidelines</td>
<td>9</td>
</tr>
<tr>
<td>Printing Darkroom: Lab Policies and Guidelines</td>
<td>10</td>
</tr>
<tr>
<td>RC Print Processing, Washing and Drying – Policies, Guidelines and Procedures</td>
<td>11</td>
</tr>
<tr>
<td>RC Print Processing: Lab Policies and Guidelines</td>
<td>11</td>
</tr>
<tr>
<td>RC Paper – Print Processing Times and Procedures</td>
<td>12</td>
</tr>
<tr>
<td>Cabrillo Photo Lab Wash Policies and Guidelines for RC Prints</td>
<td>13</td>
</tr>
<tr>
<td>RC Print Washing Instructions</td>
<td>13–14</td>
</tr>
<tr>
<td>RC Print Drying Instructions</td>
<td>14–15</td>
</tr>
<tr>
<td>Safety and Emergency Information</td>
<td>15</td>
</tr>
<tr>
<td>Security Information</td>
<td>15</td>
</tr>
<tr>
<td>Lab and Personal Safety</td>
<td>15</td>
</tr>
<tr>
<td>General Cautions</td>
<td>16</td>
</tr>
<tr>
<td>Accidental Spills or Ingestion</td>
<td>16</td>
</tr>
<tr>
<td>Eye Wash Sinks and Shower Stations</td>
<td>16</td>
</tr>
<tr>
<td>List of Art Photography Instructors</td>
<td>17</td>
</tr>
<tr>
<td>List of Art Photography Courses</td>
<td>17–18</td>
</tr>
</tbody>
</table>
Art Photography A.A. Degree

Program Description
The Art Photography program provides students with a strong foundation in the use of traditional and digital photographic technologies. The course of study bridges traditional black-and-white photography, digital photography, alternative processes, lighting, video, history of photography and contemporary trends. Classes emphasize the technical, creative image making, critical analysis, and visual communication skills needed to prepare for transfer to four-year institutions or employment in the field. All Art Photography classes transfer to either the UC or CSU systems.

Model Program for Art Photography
The following Model Program fulfills requirements for the A.A. Degree in Art Photography at Cabrillo College. Specific lower division major preparation at four-year public institutions in California can be found at www.assist.org. Please see a counselor for advisement for transfer to any four-year institution.

A.A. General Education 30 Units

<table>
<thead>
<tr>
<th>Core (15 Units)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AP 9A   Beginning Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 15   History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 42   Alternative Photographic Processes</td>
<td>3</td>
</tr>
<tr>
<td>AP 46A  Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 47   Lighting for Traditional and Digital Photography</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>AP Electives (6 Units)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>AP 9B   Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 9C   Advanced Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 14   Introduction to Video Art</td>
<td>1-3</td>
</tr>
<tr>
<td>AP 28   Medium and Large Format Photography</td>
<td>1-3</td>
</tr>
<tr>
<td>AP 45   Contemporary Trends in Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 46B  Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approved Electives (6-7 Units)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AH 20A  Survey of Art from Prehistoric Through Medieval Periods</td>
<td>3</td>
</tr>
<tr>
<td>AH 20B  Survey of Art from the Renaissance to the Present</td>
<td>3</td>
</tr>
<tr>
<td>AH 53   Contemporary Art and Visual Culture</td>
<td>3</td>
</tr>
<tr>
<td>ART 2A  Drawing and Composition</td>
<td>3</td>
</tr>
<tr>
<td>ART 2B  Drawing and Composition</td>
<td>3</td>
</tr>
<tr>
<td>ART 4   Beginning Design: Design and Color</td>
<td>3</td>
</tr>
<tr>
<td>ART 27  Graphic Design</td>
<td>3</td>
</tr>
<tr>
<td>DM 1    Introduction to Digital Media</td>
<td>3</td>
</tr>
<tr>
<td>DM 3    Design in Society</td>
<td>3</td>
</tr>
<tr>
<td>DM 4    Digital Graphics</td>
<td>3</td>
</tr>
<tr>
<td>DM 12   Photoshop Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>DM 134A Introduction to Video Production using Final Cut Pro</td>
<td>3</td>
</tr>
<tr>
<td>JOURN 20A Introduction to Photojournalism</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (2-3 Units)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Any Course Numbered 1-99)</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Total Units 30 Units
Art Studio A.A. Degree – Art Photography Option

Students may select the Art Photography Option from the Art Studio A.A. Degree program. This option is a 9-unit studio art emphasis in Art Photography. Details of the Photography Option are listed below. All Art Photography classes transfer either to the UC and/or CSU systems.

See the current Schedule of Classes for course offerings.

Art Photography Option (Choose three):

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP 9A</td>
<td>Beginning Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose two of the following to complete the 9 unit requirement:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP 9B</td>
<td>Intermediate Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 15</td>
<td>History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 42</td>
<td>Alternative Photographic Processes</td>
<td>3</td>
</tr>
<tr>
<td>AP 46A</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>AP 47</td>
<td>Lighting for Traditional and Digital Photography</td>
<td>3</td>
</tr>
</tbody>
</table>

Digital Media Approved Electives

The following Art Photography classes are approved electives within the Digital Media Program:

- AP6   Introduction to Digital Photography
- AP 9A Beginning Photography
- AP 14 Introduction to Video Art
- AP 45 Contemporary Trends in Photography
- AP 46A Digital Photography
- AP 46B Digital Photography

Facilities

The Art Photography program has facilities that allow for black & white and color photography, alternative photographic processes, digital photography, and studio work. The department has small, medium and large format cameras, pinhole cameras, Holga cameras, film processing tanks and reels, enlargers, Macintosh computers, scanners, ink jet printers and other equipment for student use. In addition, students may use or checkout tripods, cable releases, light meters, flashes, lights with stands, books, changing bags and more.

Courses

Art Photography courses are offered in black & white and color photography, alternative processes, digital photography, basic studio lighting and a survey of contemporary trends in photography. Classes emphasize technical skills and creative image making. The department has an excellent facility and an outstanding faculty and staff.

Career Possibilities

There are many career and job related opportunities for those who have studied photography – exhibiting artist, photography teacher, photographer’s assistant, photojournalist, photo lab technician, photographic retail, and commercial photography – including free-lance, salaried, or studio work in advertising, fashion, illustration, or portrait photography. Related career opportunities are also available in graphic design, museums and galleries, art organizations, and Art criticism.
Art Photography Department Policies and Guidelines

Use of Art Photography Lab Facilities
A student must be enrolled and actively participating in an Art Photography class to use the Art Photography Department Lab Facilities. The student must also pay the Lab Materials Fee for the class.

Lab Materials Fee
Instructors will hand out the Lab Fee Slips during the first two weeks of the semester. Lab fees must be paid by the end of the third week.

For this fee the student receives all chemistry needed to process B&W film and photo paper and a variety of materials for print finishing.

**AP 9A Beginning Photography Lab Fee:**

* $20 for the semester.

**Students:** Fill out a Lab Fee Slip (date, name, student ID#, semester, class, instructor, fee amount) and pay the fee at the College Bank, Admissions Window, or the Cabrillo Bookstore.

Bring the YELLOW receipt to the Photo Check Out Window and give it to a Lab Assistant – you will be given a Lab Card to fill out.

The Lab Card stays in the Lab Card File Box:
- Lab Cards are filed behind the appropriate class and instructor tab.

**Lab Fee Slip Sample**

<table>
<thead>
<tr>
<th>PHOTO LAB INSTRUCTIONAL SUPPLIES FEE VOUCHER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of photo chemicals for Spring/Summer/Winter Session</strong>: $ $</td>
</tr>
<tr>
<td><strong>Instructors:</strong></td>
</tr>
<tr>
<td>1) Fill out this form.</td>
</tr>
<tr>
<td>2) Pay lab fee at the College Bank (100 Building).</td>
</tr>
<tr>
<td>3) Return YELLOW copy of voucher to the Photo Staff at the Photo Check Out Window. (AP 9A/92)</td>
</tr>
<tr>
<td>4) Fill out a lab card.</td>
</tr>
<tr>
<td>5) Return white copy to your receipt.</td>
</tr>
<tr>
<td><strong>Name</strong>:</td>
</tr>
<tr>
<td><strong>Student #:</strong></td>
</tr>
<tr>
<td><strong>Instructor</strong>:</td>
</tr>
<tr>
<td><strong>Date</strong>:</td>
</tr>
<tr>
<td><strong>Check course that you are enrolled in:</strong></td>
</tr>
<tr>
<td>AP 9A Photography - $75</td>
</tr>
<tr>
<td>AP 9B/9C Photography - $75</td>
</tr>
<tr>
<td>AP 92 Studio Lighting - $35</td>
</tr>
<tr>
<td>AP 9RT Combined Processes - $40</td>
</tr>
<tr>
<td>AP 9RT Color Photography - $75</td>
</tr>
<tr>
<td>AP 9RT 28: Motion &amp; Large Format - $50</td>
</tr>
<tr>
<td><strong>Budget #</strong>: 12-0710-1000.541962.000</td>
</tr>
<tr>
<td><strong>Distribution:</strong> White/Student, Yellow/Photo Lab, Pink/College Bank</td>
</tr>
</tbody>
</table>

**AP 9A Students use the “A” Lab – Darkroom 1 side of the lab for both class labs and open lab time.**

**Posted Darkroom 1 Open Lab Hours:**
- Listed on AP Department website.
- Posted on Darkroom 1 entry door to the Photo Lab building.
- Posted at the Photo Check Out Window.

Please note that there are two Open Lab Hour postings at the Photo Check Out Window: “A” Lab/Darkroom 1 and “B” Lab/Darkroom 2.

Be sure to read the correct posting.

*It is advised that students make note of the Open Lab Hours: write them down in a notebook, grab with cell phone camera, etc.*

Schedule your work time accordingly – to fit Class Lab and Open Lab Hours.

**Open Lab Hours**
Open Lab Hours are available only when another AP 9A class is not scheduled to be in the lab. If a time is not posted then either another class is scheduled to use the lab or it is closed.

If a class is in session in the lab, students not enrolled in that class must ask permission from the Instructor before using the lab. Be aware that the answer may be “No” if the lab is crowded already or the Instructor has scheduled a demo, etc. Please respect the Instructor’s reply.
“A” Lab – Darkroom 1 Facilities

The following darkroom equipment & chemistry will be provided:

• Film Processing: tanks, reels, beakers, thermometers, timers, scissors, can openers, film dryer & chemistry (developer, stop, fixer, etc.).

• Printing & Print Finishing: enlargers, timers, trays, tongs, chemistry (developer, stop, fix), squeegees, dryer/drying racks, dry mount presses, etc.

• Photo Equipment available for check out from the lab: loaner cameras, tripods, cable releases, etc.

Note: If possible, students should provide their own 35mm Single Lens Reflex (SLR) film camera.

Students are expected to provide film and photo paper for class projects, a towel, a pair of scissors and other specialized materials or equipment as required or desired. (Refer to your class Supplies List.)

General Policies and Guidelines

Student Behavior and Responsibility
Students are expected to act responsibly and respectfully while in the Art Photography Lab Facilities. This includes behavior towards people, facilities, equipment and materials, as well as other people’s work and belongings. Students are expected to clean up after themselves, use responsible and safe work methods, never force equipment, and to ask questions if anything is unclear.

Failure to follow Lab policies, guidelines and instructions as outlined in this handbook may result in a temporary loss of Lab privileges or a permanent expulsion from the class and Lab.

• Do not use equipment or chemistry unless you have received instruction from your Instructor or a Lab Assistant.

• Never try to force equipment to make it work. Always ask your Instructor or the Lab Staff for help.

• Always report any broken equipment to the Lab Staff.

• Return equipment promptly to make it available for other students.

• Loupes and scissors stay in the light table area. If you remove them, return them immediately after use.

Cleanliness
Clean lab practice is essential in a communal lab:

• Please try to avoid chemistry spills and drips.
  ➢ If you do drip chemistry on the counter or floor, clean it up with a sponge and then rinse your hands and dry them with a CLEAN towel.
  ➢ If you have a big spill, or if you pour chemistry back into the wrong dispensing container, immediately notify a Lab Assistant. Don’t feel ashamed, as mistakes do happen, and it is more important that we take care of the problem ASAP.

• Do not view wet prints over light tables.
  ➢ These are negative viewing areas and must be kept clean – free of dripping chemicals and water.

• Clean up before you leave.
  ➢ Return all items (scissors, loupes, trays, contact sheet glass, etc.) to their proper place.
  ➢ Clean up any drips or spills and throw away any trash.
  ➢ Gather and remove your belongings. Remember to take your negatives out of the negative carrier.
  ➢ Return any borrowed items to the Photo Check Out Window.
• Throw away all of your unwanted prints.
  ➢ Check the processing chemical, holding and wash trays and gather your unwanted tests and prints. Rinse all before discarding.
  ➢ Do not throw away any other student’s test or print work.
  ➢ All prints left in the chemical, holding and wash trays will be tossed at the end of the night.

_Beware_ – _Students have lost final prints because they left them behind & unclaimed in one of the trays._

• Remove all of your dry tests and/or prints as soon as possible.
  ➢ Check the Print Finishing drying racks and dry print holding tub for all of your prints.
  ➢ Remove all wanted and unwanted print work _ASAP_ to make space available for new student work.

**Towel**
Film based photography is a wet process. Students are to provide and maintain a clean towel for drying cleaned hands, tanks and reels. Your towel is not for wiping up chemicals or drying dirty hands. Launder your towel often to maintain cleanliness.

**No Food or Beverages Anywhere in the Lab**
No food/drink in Print Finishing, Film Processing, and Print Viewing areas, or the Printing Darkrooms. _One Exception:_ Sealable water containers are permitted in the Print Finishing area _only._

**No Visitors in the Film Processing or Darkroom Areas**
Any visitors must meet you in the Print Finishing Area _only._

**Check Out Area and Lab Tech Office**
The Check Out Area and Lab Tech Office are off limits to all students unless s/he is working or volunteering in the Lab, or has been invited into these spaces by a Lab Tech or Instructor.

**Attendance Policies for Lab and Lecture Sessions**
Students are not allowed to work in the Lab when their class is in Lecture Session without the permission of their Instructor.

_Reminder:_ To use the Lab during a time when another class is scheduled to be in the Lab you must also receive permission from the Instructor of that class.

**Paper cutters, Exacto knives, etc.**
Use all cutting equipment with care. When using an Exacto knife place a self-healing mat under your material to protect the surface of the table.

**Lockers**
Each AP 9A student is allowed to use one small Art Photography locker during the semester s/he is enrolled in an AP 9A class. All lockers must be cleared out by the last day of finals week.

FYI: Locker security is not guaranteed. It is advised that you do not keep valuables and negatives in a locker.

• To use a locker you will need a Combination Lock – _should there be a chemical spill, lab staff must be able to access lockers._

• Locker Sign Up Procedure:
  1. Choose an available locker & put a combination lock on it.
  2. Go to the Photo Check Out Window and fill out a locker card.

**Finals Week Clean Up**
All enrolled Art Photography students are required to participate in a one-hour Lab and/or Lecture Room Clean Up during Finals Week. This is frequently scheduled during class time but other arrangements may be made by agreement with your Instructor and the Lab Staff.
Check Out & Check In Procedures for Lab Use and Borrowing Equipment

Lab Use – Film Processing:

1. Pull your Lab Card from the Lab Card File Box at the Photo Check Out Window.
2. Give the Lab Card to the Lab Assistant in exchange for the tank and reel kit that you need.
4. When you have finished processing your film:
   • Recycle appropriate film cassette parts, throw away all trash, and clean up any spills.
     *Do not put any trash in the recycling bins.*
   • Thoroughly rinse and dry the tank, reel(s), lid and cap before returning them.
     *Remember to bring your towel.*
5. Return the complete tank and reel kit when you are finished processing and the kit is clean & dry.
6. Wait for the Lab Assistant to return your Lab Card to you.
   • File your card behind the appropriate class and instructor tab the Lab Card File Box.

Lab Use – Print Processing:

1. Pull your Lab Card from the Lab Card File Box at the Photo Check Out Window.
2. Give the Lab Card to the Lab Assistant in exchange for the enlarger station that you want.
3. Print at the enlarger.
4. When you have finished printing at the enlarger:
   • Rinse and put away any trays you have used.
   • Clean up any trash around your enlarger station.
   • Clear out all of your print work –
     This includes unwanted prints and tests from all of the chemistry trays and the Holding Tub.
   • Rinse and throw away all of your unwanted prints and tests.
   • Gather all of your belongings –
     Remember to take your negative from the negative carrier and your paper from the drawer.
     *For easy return of negatives and paper write your name on your negative sleeves & envelopes/boxes of paper.*
5. Return to the Check Out Window: Tell the Lab Assistant you have finished with the enlarger.
6. Wait for the Lab Assistant to return your Lab Card to you.
   • File your card behind the appropriate class and instructor tab the Lab Card File Box.

Borrowing Equipment:

The Art Photography Department has various equipment available for AP 9A student use: 35mm cameras, tripods, cable releases, light meters, flashes, lights with stands, books, changing bags and more. Most equipment circulates for one week, however the time period may vary.

1. Pull your Lab Card from the Lab Card File Box at the Photo Check Out Window.
2. Give the Lab Card to the Lab Assistant and ask for the equipment that you need.
3. Fill out an Equipment Loan Form (name, phone #, email, etc.).
   • The Lab Card will be filed in a separate box behind the counter.
   • Be sure you understand how to use the equipment before you leave the Check Out Window.
4. The student is responsible for all equipment s/he has checked out.
   • Handle all equipment with care.
   • If any Art Photography Department equipment that you have borrowed is damaged, lost, or stolen a fee will be assessed based upon the cost to repair or replace the equipment.
5. Return the equipment either on or before the due date.
6. Report any problems you may have had with the equipment.
   • Also report any loss of equipment.
7. Be sure to return the equipment to a Lab Assistant.
   • *Do not leave the equipment at the Photo Check Out Window if no one is there to receive it.*
**B&W Film Processing: Lab Policies and Guidelines**

**Wet / Dry Areas**

Wet: All wet steps including pouring, agitation and rinsing of film processing tanks must be done in the processing sinks.

- Keep all chemicals and graduates in the sink.

*Never dump Fixer down the drain.* This is an EPA hazard.

Dry: The film loading closets and the counter under the processing charts are dry areas.

**Film Loading Room**

Always KNOCK FIRST and listen for a response before opening a closed loading room door.

Be sure to lock the door when you are ready to load film.

**Trouble Rolling Film**

If you are not sure you have loaded your reel properly, place the film or loaded reel in the tank and put on the light tight lid. You may then safely open the door of the loading room to seek help from your Instructor or a Lab Assistant. They will check it and correct it as necessary.

**Recycling Film Cassettes**

Remove all empty cassette parts from the loading room and place in recycle & trash bins.

Check the Label: Place appropriate film cassette parts in the metal or plastic recycling bins.

Do not throw trash (*film, paper towels, plastic bags, etc.*) in the recycling containers.

**Trash**

Collect and throw away all of your trash — film clippings, paper towels, etc.

Remove all trash from the loading room and film processing area.

**Wash**

Film is washed for 5 minutes. Use a timer to count the minutes.

Do not add more reels after a wash has started — you must restart the wash and reset the timer if a new roll is added.

TURN OFF the WATER when the 5-minute wash is finished.

**Film Dryer**

Turn the dryer on to warm it up before you process film.

If the film dryer is on, turn the power OFF and wait 30 seconds before opening the dryer door.

Be careful with all film:

Load film in the dryer ASAP. The longer wet film is exposed to the air in the room, the more dust it can collect!

Do not allow your wet film to touch any other film — *it will leave permanent marks.*

**Examining Your Negatives**

Look at negatives after they are dry, not when they are wet — again, wet film can collect dust that will dry into it.
Printing Darkroom: Lab Policies and Guidelines

Wet / Dry Areas
Wet: Keep all chemicals and wet items (Viewing Trays, wet prints or test strips, etc.) in the sink areas.
Dry: The enlarger stations, paper cutting counter and light box counters are dry areas.

Keep the Equipment Clean
Handle all equipment with clean, dry hands: Chemistry can damage equipment, ruin negatives and cause stains on your prints.
Keep chemistry and water off all enlarger controls, lenses, timers and other surfaces in the dry areas of the Printing Darkroom.

- Rinse and dry hands after handling processing trays, tongs, viewing trays or unwashed prints.
- Use an Unmarked Viewing Tray to bring prints out into white light for evaluation.
  Carrying unwashed prints with your hands contaminates your fingers and risks dribbling chemistry on the floor.

Enlarger Lamp Cautions
Turn the enlarger lamp off when opening the negative stage, engaging the filters or the white light, changing filter channels, and any time you walk away from the enlarger.
Do not have the enlarger light on without a negative carrier in place.
  The light spilling out can expose your paper or a fellow student’s paper (this is called “fogging”).

Tongs in Trays
Always use Tongs: Do not put your hands in the chemistry to move prints – use the proper tong to transfer prints between the different trays.
Do not move tongs from tray to tray.
All tongs are marked for the tray and chemical of use and belong on the edge of the tray:
- DEVO tongs belong at the Developer tray.
- STOP tongs belong at the Stop tray.
- FIX tongs belong at the Fixer trays, Fix 1 or Fix 2.
Prints will become stained from chemical contamination if you move the tongs from their proper tray.
Tongs that touch the wrong chemistry or that fall into the sink must be rinsed and placed back on the edge of the proper chemistry tray.

Proper Tray Use
- Use an Unmarked Viewing Tray to view unwashed prints or to transfer prints before they are washed.
  These trays have traces of chemistry in them and should never be used to carry washed prints to the Print Finishing Area sink and squeegee boards.
- Use an Unmarked Viewing Tray to move prints from the Holding Tub to the Print Washer.
  Holding Tub prints are still contaminated with fixer and must only go into a Viewing Tray.
- Use marked “Washed Prints” Tray to transport washed prints to the Print Finishing Area squeegee boards after the 5-minute final wash.
  Never use these trays for transporting unwashed prints.
Use RC Papers only in the “A” side Lab – no Fiber “FB” papers.

RC stands for “Resin-Coated”
There is a waterproof coating on the paper that allows for quicker processing – fixer, wash and dry times.

Multigrade, Variable Contrast, Polycontrast
Terminology used for papers that yield multiple contrast levels when printed under special filters that are installed in the AP 9A enlargers.

Paper Surfaces
Glossy, Semi-Gloss, Pearl, Satin, Mat/Matte, etc.

Prices vary by manufacturer, product & vendor.

- *Buy this paper from a photographic supplier.*
  We have two local stores near campus, on Park Ave: 
  Bay Photo Lab and Monterey Bay Photo Mart.
  Or use a reputable online photo supplier:
  Check your course materials or ask your instructor.

- **DO NOT OPEN the paper in the light!**
  This paper can only be opened safely under Darkroom Safelights.
  Subjecting the paper to daylight, regular room light or stray enlarger light will ruin the paper.

- **DO NOT BUY DIGITAL photo papers!**
  These papers do not work with enlargers & chemistry – they need printers & ink.

- *Put your NAME on your envelope / box of paper!*

**Print Agitation**
Agitate prints during all processing steps for the time of each step to ensure that the chemistry does its job properly.

Place prints face down in all steps after the Developer to ensure complete submersion in each solution.

Do not leave prints untended or unagitated, *especially* in the Fix trays.

**Print Draining**
Thoroughly drain each test or print over the tray it was just in for at least 8 seconds without shaking before transferring it to the next tray. This will minimize carryover of chemistry from the previous step.
## Print Processing Times and Procedures:

<table>
<thead>
<tr>
<th>Chemistry</th>
<th>Time</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developer</td>
<td>1½ – 2 minutes</td>
<td>Agitate; then drain over Dev. tray (8 seconds min.). Move to Stop tray.</td>
</tr>
<tr>
<td>Stop</td>
<td>30 seconds</td>
<td>Agitate; then drain over Stop tray (8 seconds min.). Move to Fix 1 tray.</td>
</tr>
<tr>
<td>Fix 1</td>
<td>2½ minutes</td>
<td>Agitate; then drain over Fix 1 tray (8 seconds min.). Move to Fix 2 tray.</td>
</tr>
<tr>
<td>Fix 2</td>
<td>2½ minutes</td>
<td>Agitate; then drain over Fix 2 tray (8 seconds min.). Move to Holding Tub.</td>
</tr>
<tr>
<td>Holding Tub</td>
<td>30 seconds minimum – before Viewing Tray use. 1 minute minimum – before Washing. 1 hour maximum – to avoid print damage.</td>
<td>Prints stay in the Holding Tub until enough collect for a wash. (7 – 14 Prints per Wash.) All junk prints and test strips – Rinse before throwing in the trash.</td>
</tr>
<tr>
<td>Final Wash</td>
<td>5 minutes</td>
<td>See full info in <em>Print Washing Instructions</em>: Students run a Group Wash when ready, 7 – 14 Prints. Announce the Wash and ask others to join you. Each student collects her or his own prints from the Holding Tub, puts them in an <em>Unmarked Viewing Tray</em> and transfers them to the Print Washer. One 8x10”” Print per Slot. Automatic Wash Timer is set for 5 minutes. Water Turns Off and End of Wash is Announced. Each student collects her or his own prints from the Print Washer, puts them in a “<em>Washed Prints</em>” Tray and transports them to the Print Finishing Sink. The “<em>Washed Prints</em>” Tray is rinsed and returned to the darkroom.</td>
</tr>
<tr>
<td>Drying</td>
<td>Time Varies</td>
<td>See full info in <em>Print Drying Instructions</em>: At the Print Finishing Sink – Squeegee prints carefully using gentle pressure and a clean squeegee. Option 1: Place print <strong>FACE UP</strong> on Dry Screen. <em>Always</em> place wet prints on the next available screen immediately UNDER drying prints. Return in about an hour to collect dry prints. Option 2: Dry prints with a Hairdryer. Place wet prints in the Drying Tub and blow dry with a Hairdryer. Store dry prints safely in a clean plastic print sleeve, envelope or box.</td>
</tr>
</tbody>
</table>
Conserve Water! Water is so precious and elusive that Santa Cruz is considering a Desalination plant to address its water needs.

The norm is to Group Wash 7 – 14 prints.

Throw away all unwanted test strips, prints, etc.:
Never leave unwanted test strips, prints, etc. in the Holding Tub or they will waste space in a wash. Remove, rinse and toss any unwanted test strips and prints from the Developer, Stop and Fix trays.

Thoroughly wash prints for 5 minutes and be careful to keep your washed prints clean:
Wash all of the print work you want to keep and toss the rest (rinse first!). Once washed – use a clean “Washed Prints” Tray to transport your prints to the Print Finishing Area sink to squeegee.

Pay Attention!
You are responsible for your prints. Any prints left unattended will be tossed in the trash!

### RC Print Washing Instructions

**Prior to a Wash:** All prints, etc. have gone from the Fix II tray to the Holding Tub at the end of the processing line in the main sinks. All unwanted tests and prints are rinsed and thrown away.

**Prints stay in the Holding Tub:** Until enough collect (7 – 14) for a wash.

**Students:** Coordinate and run a Group Wash when ready. *Exception: An individual’s need to do a wash.*

- Group washing is VERY important in order to conserve water.
- It is advised that one or two students be the *Wash Monitors* and take charge of the wash.
  1. *Wash Monitors:* Announce the start of a wash and ask if other students want to join you.
  2. *Wash Monitors:* Turn the water on at an available Print Washer.
  3. Collect *only your prints* from the Holding Tub: Put them in an Unmarked Viewing Tray and transport them to the Print Washer.
    - DO NOT use a "Washed Prints" tray at this stage, you must use an Unmarked Viewing Tray.
    - Remember to gather and rinse unwanted print work and toss it into the trash.
    - Never ever take another students’ prints from the Holding Tub – Each student is to move his or her own prints to the Wash Tub.
  4. Transfer prints to the Print Washer.
    - Carefully place one 8x10” print per slot into the Print Washer.
5. Wash is 5 minutes long.
   • Turn the water and let run for 5 minutes.
   • Wash Monitors & Everyone with Prints in the Wash: Check the clock and watch the time or set a personal timer so you will know when the wash ends.
   • Do not add any unwashed prints to a wash that is in progress!
     Anytime prints are added to a wash you must restart the 5 minute wash time.

6. Wash End – TURN OFF the Water after 5 minutes.
   • Wash Monitors: Stay on top of this because you need to do the next step...

7. Wash Monitors: Announce that the Wash is Done.

8. Each student collects her or his own washed prints and puts them in a clean "Washed Prints" tray.
   • Use a Print Rod to help fish prints out of the Washer – Do not force a hand between the dividers.
   • Never transport washed prints in an Unmarked Viewing Tray – it has Fixer in it and the prints will need to be rewashed for 5 minutes.

9. Take your prints to the Print Finishing Area sink to squeegee and follow the Print Drying Instructions.

   Warning: All prints left in the darkroom are thrown away at the end of the night.

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**RC Print Drying Instructions**

All print work is brought to the Print Finishing Area sink to be squeegee'd.

1. Squeegee your Prints – carefully and with gentle pressure using a clean squeegee.
   • Squeegee both sides of the print – And squeegee the board in between squeegeeing the Print.
   • Be careful – the front side of the Print scratches easily.

2. Find available space on a Drying Screen in one of the Drying Racks – on the next available screen immediately UNDER any drying prints.
   • *If there is no space on the Dry Rack Screen:*
     Prints that are completely dry may be moved to the Dry Print Storage Tub on the counter. Drying Screens may be moved as needed to created space for wet prints to be loaded below prints that are already drying.

3. Place your Prints onto the Drying Screen – again, immediately UNDER any drying prints to avoid dripping water onto other prints.
   • Always load RC prints “Face Up” – Emulsion Side Up.
   • Be careful – do not overlap any prints because wet prints will stick together and become damaged.
   • Be careful when moving screens – make sure prints do not slide over one another and create an overlapping sticky situation.

4. Return all empty "Washed Prints” trays to the darkroom.

   **DRY TIME: Prints air-dry on the screens in about ONE HOUR.**

5. To Dry RC Prints more Quickly – Use a Hairdryer.
   • Place wet prints in a Drying Tub or Tray and blow dry with a hairdryer.
     Again, do not overlap any prints or you can cause damage.
6. Collect Prints Left to Dry ASAP.
   • Always check to make sure you do not take any prints that do not belong to you.
   • FYI: Dry rack screens may be rotated and emptied as needed to accommodate more prints.
     Look through all of the screens and check the Dry Print Storage Tub to find all of your prints.

7. Dry Print Storage – Protect Your Work!
   • Store dry prints in a clean plastic print sleeve, envelope, or box.
   • Use a notebook to store negative and print sleeves.
     There are special photo notebooks available that close on all sides. These will help keep
damaging dirt away from negatives and printed work.

SAFETY & EMERGENCY INFORMATION

EMERGENCY: 911
NON-EMERGENCY: Campus Police (479)-6313
In case of emergency: Ask any member of the Lab Staff or Faculty for assistance.

Security

Do not leave your personal belongings or Art Photography Department equipment unattended.
FYI: Lockers are available for student use. See Locker info in section “A” Lab – Darkroom 1 Facilities.
Each student is responsible for the equipment s/he checks out:
Please handle all equipment with care. If any Art Photography Department equipment that you have
borrowed is damaged, lost, or stolen a fee will be assessed based upon the cost to repair or replace the
equipment.
Instructors and the lab staff are not responsible for work or belongings left unattended in the lab, or
unclaimed at the end of the semester.

Lab and Personal Safety

Precautions should be used as many chemicals utilized in photography have slight to serious health and
safety hazards. These chemicals can cause skin or lung problems through inhalation of dust/powdered
chemicals or vapors. Women who are pregnant are advised to consult with their physician and abstain
from photographic chemical usage for at least the first trimester.

The Photography Lab has Material Safety Data Sheets (MSDS) on file in a binder for all of the
chemicals that we use. The sheets list a product’s chemical contents, its health and safety hazards, and
methods for its safe use, storage and disposal. The MSDS also includes information about fire hazards,
reactivity, first aid and procedures for cleaning up leaks and spills. Ask for this binder if you want to
read any MSDS sheets.

If chemical poisoning is the medical emergency, please remember to take the chemical package with
you to accurately inform the physician who may need to contact a poison control center.
For a major medical or police emergency notify a Lab Staff or Faculty member to call 911.
General Cautions – Follow these guidelines to prevent accidents and minimize the chance of injury:

- Treat all photographic chemicals as hazardous substances, especially when disposing of them.
- Never pour fixer down the drain.
  It contains silver – a heavy metal that is hazardous to the environment according to the EPA.
- Avoid inhaling chemical vapors, powders and dusts.
- Do not swallow any photographic chemical.
- Do not let any photographic chemical come in contact with your eyes.
- Do not put your hands in the chemistry – use the proper tong to transfer prints between trays.
- Wash your hands after using chemicals.
- Do not eat or drink in the Lab areas.
  No food or beverages anywhere in the Print Finishing, Film Processing, and Print Viewing areas, or in the Printing Darkrooms.
  **One Exception:** Sealable beverage containers permitted in Print Finishing area only.
  *Food and drink can absorb chemicals and fumes – therefore you would be consuming the lab chemicals along with your food!*
- Use gloves, an apron, and goggles or a facemask when handling powdered chemicals and concentrates.
  Glove material should be impervious and resistant to chemicals.
  Goggles should protect the eyes from irritating or corrosive chemicals.

ACCIDENTAL SPILLS OR INGESTION

- Spills and splashes are to be promptly mopped or wiped clear.
  Contact a Lab Assistant to handle major spills.
  **Beware:** Certain chemicals are highly toxic in powder form. They easily become airborne and inhalable – causing potentially serious health risks.
- **Flush skin and/or eyes with cold water immediately after contact with acid.**
  Flush eyes for a minimum of 15 minutes. Do not scrub the area.
  After flushing, wash skin with a pHisoderm type of cleanser.
  **Call a physician as needed.**
- **Do not induce vomiting after ingesting acid.**
  Drink a neutralizing agent, such as milk.
  **Call a physician as needed.**

There is a small First Aid Kit with various items to treat minor emergencies such as little cuts, etc in the Lab located at the Photo Check Out Window. Contact a Lab Assistant or Instructor for help.

Eye Wash Sinks and Shower Stations are to be used for an emergency only.

There is an Eye Wash Sink and Shower Station in each Film Processing and Darkroom area:

- Use a station immediately if corrosive or toxic chemicals come in contact with your eyes or face or if there is a major chemical spill on your clothes or body.
- Take care with the use of the stations, as the water is not drained and will spill out onto the floor.
- If possible, have a Lab Assistant or Instructor help you.
## List of Art Photography Instructors

The following is a list of Art Photography Instructors and the classes they frequently teach.

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Classes Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ken Alley</td>
<td>AP 6, AP 46A, AP 46B, AP 9B, AP 9C</td>
</tr>
<tr>
<td>Pat Anderson-Huboi</td>
<td>AP 9A</td>
</tr>
<tr>
<td>Martha Casanave</td>
<td>AP 42A, AP 42B</td>
</tr>
<tr>
<td>Sandra Frank</td>
<td>AP 6, AP 9A, AP 28, AP 47</td>
</tr>
<tr>
<td>Gordon Hammer</td>
<td>AP 9A, AP 9B, AP 9C, AP 28</td>
</tr>
<tr>
<td>Susan Hoisington</td>
<td>AP 9A, AP 9B, AP 9C</td>
</tr>
<tr>
<td>Lesley Louden</td>
<td>AP 6, AP 46A, AP 46B</td>
</tr>
<tr>
<td>Sheila Malone</td>
<td>AP 14, AP 32, AP 45</td>
</tr>
<tr>
<td>Victoria May</td>
<td>AP 9A, AP 46A, AP 46B</td>
</tr>
<tr>
<td>Greg Mettler</td>
<td>AP 6, AP 9B, AP 14, AP 15</td>
</tr>
</tbody>
</table>

## List of Art Photography Courses

**AP 6 Introduction to Digital Photography**
Introduces basic digital photography skills: camera operation and exposure controls; Macintosh computer basics; elementary software image quality adjustment techniques; printing and digital output; composition; visual communication.

**AP 9A Beginning Photography**
Introduces the basic principles, practice and aesthetics of black and white photography including camera operation, film processing and darkroom based printing, print presentation, composition and visual communication.

**AP 9B Intermediate Photography**
Continues the application of the principles and practices of black and white photography from AP 9A with a focus on fiber base paper printing techniques, Zone System practices and thematic projects.

**AP 9C Advanced Photography**
Continues the application of the principles and practices of black and white photography from AP 9B with a focus on refining printing techniques and Zone System practices, thematic projects, and portfolio development.

**AP 14 Introduction to Video Art**
Introduces video art through hands-on production, analysis of video art work, and exploration of the evolution of video as an art form. Provides introductory training in digital video and audio production and digital post-production techniques while examining formal, conceptual, and structural strategies of video art practice. Taught on Macintosh computers using Final Cut Studio.

**AP 15 History of Photography**
Surveys the history of photography from its origins to the advent of the digital age in the 20th Century. Examines the practice of photography as an art form and as a form of visual communication in historical, socio-political and cultural contexts. May be offered in a Distance-Learning Format.

**AP 28 Medium & Large Format Photography**
Introduces techniques and aesthetics of medium and large format photography through hands-on training in the use of medium format camera systems and 4X5 view cameras. Includes specialized exposure, processing and printing techniques for B&W sheet and roll films. Introduces color negative and transparency materials and digital imaging methods.

**AP 32 Combined Processes**
Explores the use of traditional and digital imaging techniques with traditional, digital and alternative media. Includes traditional and digital techniques for creating enlarged negatives for contact printing, as well as methods for combining photographic imagery with other art media and non-traditional materials.

**AP 42A Alternative Photographic Processes I**
Introduces creative photographic image making utilizing historical, contemporary, and non-traditional applications of silver-based and non-silver photographic processes. Includes mixed media combinations and digital imaging techniques.
AP 42B Alternative Photographic Processes II
Continues the investigation of creative photographic image making utilizing historical, contemporary, and non-traditional photographic materials and processes from AP 42A

AP 45 Contemporary Trends in Photography
Examines the images of contemporary photographers worldwide to illustrate the major themes and concepts in photography from 1945 to the present. Includes visual presentations of images, discussions and gallery field trips designed to enhance the student's personal vision and promote creative visual thinking. No lab time required. May be offered in a Distance-Learning Format.

AP 46A Digital Photography
Teaches tools and techniques for creating expressive photographic images with Adobe Photoshop including scanning, importing, manipulating, printing and digital output. Covers menus and tools, selection controls, retouching, global and selective image adjustments, filters & effects, compositing, and combining text and imagery. Taught on Macintosh. Adaptable to Windows. Students may use either film or digital cameras.

AP 46B Digital Photography
Continues the study of digital photography from AP 46A with a focus on integrating aesthetic and design principles with imaging software possibilities to expand creative expression. Taught on Macintosh. Adaptable to Windows. Students may use either film or digital cameras.

AP 47 Studio Lighting for Photography
Introduces fine art and commercial applications of studio lighting equipment and techniques applicable to film based and digital photographic practices, including portraiture, tabletop photography, and medium and large format cameras.

AP 40 A-Z Studies in Photography
Investigates special areas of interest in Photography. The special area topic to be covered will be announced and described in the Schedule of Classes.