Cyanotypes

A short “how to” on getting a little dirty...
*I’ve been an artist my whole life
   …and a photographer for 18 years.

*I love caffeine and chocolate.

*I love cats and I’m learning to love the dog

*I am learning to push myself as hard as I push back.

*I love teaching art and photography. I teach my future consumers AND my future competition.

*I married the first serious boyfriend I ever had.

*If you don’t love Star Wars, LOTR, Narnia, illustration, fonts and tattoos, I’m not sure about the possibility of us being good friends…but it *could* work...
Chemistry

• Cyanotype solution A (Ferric Ammonium Citrate; Oxalic Acid)
• Cyanotype solution B (Potassium Ferricyanide; Oxalic Acid; Ammonium Dichromate)
  • Neither of these pose a serious health risk when using them in cyanotypes
  • Leftover solutions can be disposed by diluting generously with water and rinsing down the drain
• Tween

A list of all chemistry and material sources will be provided at the end of the workshop…
Paper

Most surfaces suggested have the following in common:

• They are a neutral PH
• They stand up to use in water

If you decide to work with a paper surface, try *starting* with:

• 100% rag based paper
  • I have had the best success with HOT PRESS paper that is at least 50lb
  • Often I work with Arches or Rives, which are well known printmaking papers

• After mastering the “usual suspects” when it comes to paper, don’t shy away from experimenting with other, non-traditional paper surfaces
  • Why NOT a paper bag or vintage newspaper?
Materials Needed (cont.)

- Hake brushes
- Hydrogen peroxide (available in any drug/grocery store)
- Trays
- Running water
- Hair dryer
Materials Needed (cont.)

- Some sort of contact printing frame
  - Gold standard would be the split back proof printer
  - Also, a standard proof printer will work
  - In a pinch, plexi and foamcore with clamps
Prepping Your Surface

• Notations on your paper
  • Keeping track of such items as how many coats of chemicals; time of exposure; UV index

• Alternative Processes are not set in stone; keeping notes helps in your process, your discovery
Coating Your Paper

- Lay out your paper on a NON-porous surface
- Brushes should be damp so that they don’t wick the solution
- We will be using 6 DROPS of each solution
  - Finished size will be about 4x5
  - One can try diluting the mixed solution which will soften – or flatten – the cyanotype’s contrast
In addition, you will add 1 drop of “Tween”

Dump mixture in middle of paper and use brush to quickly coat the surface of your paper evenly

Let dry…

- The final paper should be an intense green-yellow color; if there is some blue or blue-grey, you paper has been fogged and it shouldn’t be used

To increase contrast in your cyanotype, try “double coating” your surface – i.e. two coats of chemicals

- This will result in a longer exposure time being needed
Exposing the Cyanotype

• Cyanotypes must be “overexposed” to create the best image
• When placing out in the sunlight, your blue, uncovered surfaces will eventually turn to a silvery-green/blue
  • Thus indicating a proper exposure
Processing Your Cyanotypes

• You’ll want to rinse your cyanotype in cool water for 12 – 15 minutes, until the water is no longer yellow, but running clear
To “Boost” Your Image

To “boost” your image, soak in a 1:9 solution of hydrogen peroxide and water

(Top = without hydrogen peroxide;
Bottom = after boosting)
A Short History of Cyanotypes

• The cyanotype is one of photography’s oldest printing methods.
  • The cyanotype was the first simple, fully realized, and practical non-silver iron process.

• Sir John Herschel was making cyanotypes as early as 1841, only three years after the “official” announcement of the discovery of photography

• The cyanotype provided permanent images in an elegant assortment of blue values.
  • Information taken from Christopher James’s The Book of Alternative Processes
Why Cyanotypes Are A Perfect Transition into Alt Processes

• They’re simple!
  • Paper, chemicals and something to print
  • Can also be pre-made and bought in kits (ex: Sunprintables)

• Darkroom not necessary - UV light helps to produce the image
  • So, sunlight (it’s free) can be harnessed to create an image

• Relatively low toxicity

• NO CAMERA NEEDED
Materials

3rd Annual High School Photography Show

Presenting Work by Students of:
Newton South High School
Weston High School
Woburn High School

Exhibition Dates:
Monday, December 1st - Saturday, December 14th

Opening Reception:
Wednesday, December 3rd
6pm - 8pm

EP Levine
Everything Photographic
219 Bear Hill Road | Waltham, MA | 617-951-1499 | www.eplevine.com
Cyanotypes and Digital Photography
Creating a Digital Negative

- Starting with a bold image with a lot of contrast usually yields better results.

SARAH MARIE STUDIOS
• Negatives from digital files that are to be used for cyanotypes usually need:
  • Sharpening – since cyanotypes tend to “blur” the edges, images that are slightly over-sharpened tend to print more effectively
  • An increase in contrast – a slightly darker and more “contrast-y” negative prints better with the cyanotype process
• A full tutorial is impractical for this hands-on workshop; however if you have some knowledge of Photoshop, here are some great resources to assist in your process (links embedded):
  • YouTube – “Creating A Digital Negative for Cyanotypes” by Jason Leath
  • If you are comfortable with Photoshop: Downloadable curves for specific types of Alt Processes
Key Steps to Creating a Negative

Import your image into Photoshop and convert to a black and white image

• One can use an “action” or a premade process for this
• The most basic technique is (in CS5) Image > Adjustments > Black & White

Increase contrast  -  Image > Adjustments > Brightness & Contrast
Key Steps to Creating a Negative

- Increase sharpness
  - Create a copy of your background layer
  - Filter > other > high pass; adjust accordingly
  - Set your “background copy” to “overlay” in your layers menu; you may have to also adjust your layer’s opacity

- Flatten your layers and then invert image to create a negative; don’t forget to flip horizontally as well

- Print your negative out on Pictorico transparency film

- Expose your cyanotype accordingly
Most of the information for this presentation was gathered from

- The Book of Alternative Photographic Processes
  - Third Edition; By Christopher James, “bible” of alt processes
- Cyanotype: Historical and Alternative Photography
  - By Peter Mrhar

Further hands on learning

- Lesley University, College of Art and Design (LUCAD) – formerly Art Institute of Boston
- Maine Media Workshops – New Gloucester ME
- Santa Fe Workshops
Purchasing Information

• Bostick and Sullivan – all your cyanotype needs
  • Family owned and very helpful with customers

• Pictorico transparency sheets

• Blueprints on Fabric – in Washington