

**ART2501C - PAINT INVESTIGATION COLOR****Meeting Times/Location: Fad 105/ TBA****Instructor: Jefreid Lotti****Email: [jefreidlotti@ufl.edu](mailto:jefreidlotti@ufl.edu)****Semester/Year: Fall 2015****Credit Hours: 3****Office Location/Hours: FAD 210 F 3-4****Course Description:**

This course investigates the visual language of painting and introduces the fine arts major to techniques and concepts relevant to painting including a comprehensive study of lights, darks and color.

**Course Objectives:**

The main objective is for you (the student) to become familiar with handling paint to create dynamic value structures and compositions. You will employ a variety of techniques to expand upon your visual language. Critique sessions will continue to develop your abilities to talk about your work and ideas. You will also be expected to apply critical insight to the work of your colleagues.

**Main Topics Outline:**

- Form in light
- Figure Ground (Shapes interactions, ground tension, figure ground reversal, Positive v.s. Negative shapes)
- Color Theory and Applied Color: Properties of color and properties of pigments: (Value, Chroma, Hue, Temperature and Complements) (Color=Space)
- Color Usage (optical, local and psychological)
- Color mixing (additive subtractive)
- Visual organization (harmony, variety, balance, proportion, dominance, movement, economy)

**Required Text:**

Hawthorne on Color

**Evaluation:**

90% 5 projects including exercises

10% Participation in class workdays, discussions, and critiques is expected and will reflect in your participation grade. **Final cleanup will also factor into this grade.**

## **Class Attendance and Late work policy**

(Requirements for class attendance and make-up exams, assignments and other work in this course are consistent with university policy and can be found at: <http://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.)

Attendance is required.

Roll will be taken at the beginning of class.

Tardiness will affect your participation grade.

A point for every late arrivals (5 min after the class time starts) and 3 points for every unexcused absence.

A missed class does not constitute an extension of an assignment.

No assignment will be accepted late unless previously arranged with professor.

Unexcused late assignments will receive a zero.

## **Grading Scale**

A 95-100, A- 94-90, B+89-87, B 86-84, B-83-80,C+79-77,C 76-74,C- 73-70, D+ 69-67, D 66-64, D- 63-60, E 59-0

### **Grade Explanations**

A = Superlative work: Careful attention to craft and presentation. Intent and execution of the piece work together in significant and original way. Goes beyond merely solving the problem one who performs at this level is visibly outstanding. Outstanding in every respect.

B = Above average: Solution to the problem and idea well planned. Execution is well done and goes beyond merely solving the problem. This is an honorable grade.

C = You have solved the problem: The requirements of the problem are met in a relatively routine way. Solid average work.

D = Inadequate work: The requirements of the problem are not addressed. The piece represents careless and /or incomplete effort. Some criteria met, work substandard.

E = Unacceptable work and effort

**A "C" represents satisfactory work, regular attendance, and successful accomplishment of the course.**

**A GRADE OF C- OR BELOW WILL NOT COUNT TOWARDS YOUR MAJOR REQUIREMENTS.**

### **LOCKERS/STORAGE**

The SAAH is not responsible for items in lockers. Please watch for posted signs on lockers regarding their use. Each student must share a locker with two students. You are responsible for keeping the locker form attached AT ALL TIMES to your lockers. Lockers will be cleaned out at the end of each semester.

When storing materials you must write your name on everything with a black marker, the course you are in and the instructors name. The SAAH is not responsible for items left in classrooms.

### **ACADEMIC HONESTY POLICY**

The university's policies regarding academic honesty, the honor code, and student conduct related to the honor code will be strictly enforced. Full information regarding these policies is available at <http://www.registrar.ufl.edu> and <http://www.dso.ufl.edu>

### **ACCOMODATION FOR STUDENTS WITH DISABILITIES**

Students requesting classroom accommodation must first register with the Dean of Students Office. The DOS will provide documentation to the student who must then provide this document to the instructor. DOS can be contacted at: 352-392-1261 or <http://www.dso.ufl.edu/drp>

### **SA+AH HEALTH AND SAFETY POLICY (SEE ATTACHED APPENDEX)**

The School of Art and Art History Safety Manual will be reviewed in class. Students and instructors are responsible for following policy and procedures for making art safely at all time. The entire document is available online <http://saahhealthandsafety.weebly.com/handbook.html>

All students are required to sign and turn in the signature page to the instructor on the first day of class.

## **Health & Safety Area Specific Information: Painting**

### **1. Hazards (inherent)**

#### **Acrylic Paints**

May contain ammonia which may cause eye, nose, throat irritation, especially if large amounts are used; may contain preservatives, such as formaldehyde - Precautions: Good hygiene; switch to formaldehyde-free painting medium; avoid inhaling pigment powder; use least toxic preservatives possible; clean brushes properly.

#### **Watercolors and Gouache**

Inhalation: Moderately toxic - Skin Contact: Slightly toxic - Gum arabic and gum tragacanth cause skin allergies; gum arabic can cause asthma; may contain preservatives, such as formaldehyde - Precautions: Good hygiene; switch to formaldehyde-free painting medium; avoid inhaling pigment powder; use least toxic preservatives possible; clean brushes properly.

#### **Tempera**

Inhalation: Highly toxic- Skin Contact: Highly toxic- Hazards in pigments & preservatives; tetrachloroethane highly toxic; more toxic than carbon tetrachloride, causing severe liver damage - Precautions: Good hygiene; clean brushes properly; DO NOT USE tetrachloroethane.

#### **Latex**

Ingestion: Slightly toxic if glycols are present - Skin Contact: Possibly toxic if the paint contains glycol ethers - May contain glycols, mercury - Precautions: Good hygiene; clean brushes properly; DO NOT USE paints with mercury preservatives.

#### **Oil Paints**

Ingestion: Pigment Poisoning - Skin Contact: Pigment poisoning; When used with solvents: all solvents are moderately toxic by all routes of entry- ingestion, inhalation, and skin contact - Precautions: Good hygiene; adequate ventilation; wear nitrile gloves; clean brushes properly; DO NOT USE with banned solvents.

#### **Alkyd and Other Solvent Based Paints**

Inhalation: Toxic - Pigment hazards; solvent-based paints more hazardous than oil paints; much more solvent exposure; toluene/xylene much more toxic than paints with mineral spirits – Ingestion: Pigment and solvent poisoning – Skin Contact: Pigment and solvent poisoning - Flammable - Precautions: Good hygiene; use with adequate ventilation; wear nitrile gloves; clean brushes properly; DO NOT USE toluene or xylene based alkyd paint; DO NOT USE with banned solvents.

## Solvents

Inhalation: slightly to highly toxic depending on type; acute inhalation can cause dizziness, nausea, fatigue, memory loss, coma, and respiratory irritation; chronic inhalation can cause organ damage, respiratory allergies, and brain damage – Ingestion: slightly to highly toxic depending on type; ingestion can be fatal and cause aspiration into the lungs after vomiting – Skin Contact: slightly to highly toxic depending on type; can cause defatting of the skin and dermatitis; can be absorbed through skin – Flammable: solvents can spontaneously combust; dispose of solid waste contaminated with solvents in red bin – Volatile: solvents will evaporate quickly; keep containers closed at all times, even while using – Precautions: Use with adequate ventilation; wear nitrile gloves; keep all containers tightly closed; store only in glass or metal that have lids; minimize use and reuse; use least toxic types; never dump down drain; clean brushes properly; do not clean hands with solvents; dispose of solid waste contaminated with solvents in red bin; DO NOT USE banned solvents.

The following solvents are not permitted for use in the SA+AH\*:

Turpentine, Turpenoid, Mineral Spirits, Oil of Spike, Damar Varnish, Denatured Alcohol, Benzene, Toluene, Paint Thinner

The following solvents (odorless mineral spirits) and solvent containing-mediums are allowed for use in the SA+AH\*:

Gamsol (Gamsol is supplied by the SA+AH), Sansador, Galkyd, Liquin

\*This is not an exhaustive list. If you want to use something not listed here please check with your instructor or lab specialist.

Pigments (see attached chart)

Many pigments are toxic, including those based on lead, cadmium, mercury, chromates, manganese, and cobalt. The main risk is from accidental ingestion of the pigments due to eating while working, nail-biting, pointing your brush with your lips, 21 and similar means of hand-to-mouth contact. Using dry pigments can allow the pigments to be breathed in through the air

(this also occurs when using encaustics in an unventilated space.)

## 2. Best Practices

- Don't eat, drink, smoke in studio
- Wash hands, including under fingernails (good hygiene)
- Wear nitrile gloves
- Avoid inhaling pigment powder

- Use least toxic versions of paints, mediums, solvents
- Don't do solvent washes
- Reuse solvent: Used solvent can be reclaimed by allowing the paint to settle and then pouring off the clear solvent into another jar. The sludge that remains at the bottom must be disposed of in the liquid waste jug.
- Remove paint from hands with baby or vegetable oil—Do not wash it down the sink
- Work in a well-ventilated area. Use solvents near exhaust vents.
- Take breaks during painting to step outside for fresh air.

3. Links <http://www.ci.tucson.az.us/arthazards/paint3.html>  
<http://web.princeton.edu/sites/ehs/artsafety/sec10.htm>  
<http://www.chicagoartistsresource.org/node/9279>

#### 4. Area Rules

All users of the studio classrooms are expected to follow studio area rules at all times. If you have any questions,

ask your instructor.

- Follow all SA+AH Health and Safety handbook guidelines (the handbook should be reviewed by your instructor and can be found at: [www.arts.ufl.edu/art/healthandsafety](http://www.arts.ufl.edu/art/healthandsafety))
- In case of emergency, call campus police at 392-1111
- File an incident report (forms may be found in the SAAH H&S handbook, the SAAH faculty handbook and in the main office. Turn completed forms into the SAAH Director of Operations within 48 hours of the event.
- Follow the SA+AH Satellite Waste Management Chart in the classroom and other health & safety guidelines posted for your media. Keep the Satellite Waste Management Area (SWMA) clean and organized. Follow the SWMA guidelines posted.
- Do not prop classroom doors. Doors are to remain closed to ensure the building HVAC and ventilation systems work properly.
- Keep solvent fumes to a minimum by covering containers in use even while painting. Don't leave brushes sitting in jars of solvents.
- Clean up after yourself. Wash hands and all tools properly. Dispose of all towels and gloves in the red bin. Close all containers, and return anything flammable to the yellow flammable cabinet.

- No hazardous materials, oils, or solvents down sinks.
  - Follow guidelines for brush cleaning found at each SWMA. See section below for instructions on using Parts Washers.
  - Store all flammables in the flammable cabinet, Keep flammable cabinet closed at all times.
  - All Hazardous Waste must be labeled with the yellow labels found at the SWMA (use this label when item is designated as trash).
  - Practice best practices for material handling. If you have questions about a material, ask your instructor for guidance.
  - No aerosol cans may be sprayed in any classroom/studio in the SAAH. A spray booth is located in FAC room 211A.
  - Wear nitrile gloves when handling hazardous materials. These are provided in your classroomstudios.
  - Remove all trash that does not fit in trashcans to the dumpster on the south side of FAC. Any trash that does not fit in the trash can must be immediately taken to the dumpster. All oversized trash (has any length that exceeds 4 feet in any direction) must be taken to the dumpster on the south side FAC and placed beside the dumpster in the area designated for oversized trash. Broken glass must be packed inside paper and labeled on the outside as broken glass and walked to the dumpster. Glass with hazardous materials must be wrapped, labeled with a filled out yellow hazardous waste labels and placed in the blue bin at the SWMA. The trash guidelines are to ensure the safety of
- 22 anyone encountering the trash. Liquids, medical waste, yard waste, appliances and pallets are prohibited from disposal in the dumpster.
- No eating, consumption of alcohol or smoking is permitted in the studios.
  - Clean up after yourself- wipe down surfaces (easels, drawing boards, stools with a wet towel).
  - Do not block doorways.
  - Do not block access to lights.
  - Do not remove furniture from rooms or borrow furniture from rooms without permission from the area coordinators.

- Do not create “daisy chains” with multiple electric cords. Unplug cords when not in use.
- First aid kits are found in each studio. Notify your instructor if supplies are low.
- Locate the nearest eyewash unit and familiarize yourself with its functions.
- Report any safety issues IMMEDIATELY to your instructor.
- All courses must engage in an end of the semester clean up.
- Follow the SA+AH CONTAINER POLICY (see policy below)

There are 2 types of labels used in the SA+AH-- yellow and white. Both labels are found at the red MSDS box and are supplied by the SA+AH. Each is used for a different purpose.

White:

All new and or used product in containers (hazardous or what might be perceived as hazardous -i.e. watered down

gesso, graphite solutions, satellite containers of solvents, powders, spray paints, fixatives, oils, solvents, etc...) must be labeled within the SA+AH to identify their contents. Labels can be found at the MSDS box in each studio and work area. All containers must be marked with your name, contents and date opened. All secondary/satellite All secondary/satellite containers for hazardous materials must be marked with content, your name and the date opened. All unmarked containers will be disposed of with no notice.

Yellow:

WHEN HAZARDOUS ITEMS ARE DESIGNATED AS WASTE.

All containers must have a yellow label identifying the contents that are designated as trash for weekly EHS pick up.

- Flammable solid containers (red flip top) must have a yellow hazardous waste label on the outside (top).

- 5 gallon jugs must have a yellow hazardous waste label on the outside.

- Fibrous containers must have a yellow hazardous waste label on the outside (top).

- Each item in the blue bin must have a yellow hazardous waste label.

Note: HazardousWaste labels should include all constituents in the waste mixture as well as an approximate percentage of the total for that item and must add up to 100%.

Labels should also include the Bldg and room number of the shop generating the waste along with the Waste Manager for your area, this is located on the SWMA sign posted at the sink or at the Waste Management Area.

Parts Washer Paintbrush Cleaning Stations



Safety-Kleen solvent based parts washer- Red with black basin, hereinafter referred to as the solvent based parts washer. Contains 5 gallons of Gamsol. This solvent is an inhalation, ingestion and contact hazard. Minimize exposure by always wearing gloves, being sure not to spray outside of basin, using near ventilation, and always close lid when finished.

Safety-Kleen aqueous based parts washer- Red with blue basin, hereinafter referred to as the aqueous based parts washer. Contains 5 gallons of either Safety Kleen brand water based degreaser or Simple Green Crystal, parts washer will be labeled with type. These degreasers are corrosive and irritants. Minimize exposure by always wearing gloves, being sure not to spray outside of basin, using near ventilation, and always close lid when finished.

When the station is not actively being used the top lid must be closed. This is especially important for the solvent based washer (black basin)! Do not leave open. Always TURN OFF parts washer when finished or when not actively being used. Do not leave it running. Never use an extension cord or power strip. Always plug directly into wall outlet.

Safety-Kleen Parts washer must be used next to ventilation. No exceptions. Always use provided personal protective gear- gloves, apron, and eye protection when using the parts washer. Always wash hands afterwards.

23 CLEAN UP station and area when finished. Wipe any paint off edge of parts washer before closing lid. TURN OFF parts washer when finished. ALWAYS THROW AWAY ALL GLOVES AND TOWELS USED AT STATION INTO THE RED OILY WASTE CAN!

Solvent based parts washer is for the cleaning of brushes used with oil based paints & mediums, and solvents. Do not use the solvent based (black basin) parts washers to clean nonoil based paints and mediums like latex, water based or acrylic paints and gesso.

Aqueous based parts washers (blue basin) is for cleaning water based, acrylic, and latex based mediums, paints and gesso. Never clean brushes used with oil based paints & mediums, or solvents.

Parts Washers are for cleaning paintbrushes only. Absolutely no paints, solvents or liquids of any kind may be dumped or poured directly into parts washers. The parts washers are considered to be one of the last steps in the paintbrush cleaning process. First steps are always to wipe and dip clean the brush, depending on paint type, in solvent, oil, or soapy water first.

How To Use Parts Washers:

1. Remove excess paint from brush by dipping into cleaner/solvent of choice for type of paint being used- water, soap, gamsol, or oil and then wipe excess off on rag/towel or newspaper.
2. Put on Personal Protective Gear- gloves, apron, eye protection.

3. Open lid of parts washer and make sure that spray nozzle is pointing down.
4. Turn on parts washer and wait until cleaning liquids starts spraying out.
5. Simply place brushes under spray, and rinse and wipe on nozzle brush/basin until they rinse clear. You can also check by wiping on clean towel for traces of paint.
6. Wipe off with towel when finished, and you may now do a final rinse with water in the sink.
7. Don't forget to turn off parts washer, close the lid, and throw away all towels and gloves in RED OILY WASTE CAN when finished. CLEAN UP!

#### Toxic Paint Pigments/ Painting

The following paint ingredients are extremely toxic to you through skin contact, inhalation, or if swallowed.

Know that you have a choice when purchasing art supplies and choose paints that are non-toxic to you, others and the environment.

Highly toxic pigments- Avoid at all costs

Lead Red (Red 105) Contains lead

Molybdate Orange (Red 104) Contains lead and chromates

Chrome Orange (Orange 21) Contains lead and chromates

MercadmiumOrange (Orange 23) Contains cadmium, mercury and sulfides

BariumYellow (Lemon Yellow, Barium Chromate, Yellow 31) Contains barium and chromates Chrome Yellow (Chrome Lemon, Primrose Yellow, Lead Chromate,

Yellow 34) Contains lead and chromates

Zinc Yellow (Zinc Chromate, Yellow 36) Contains chromates

Naples Yellow (Lead Antimonite, Antimony Yellow, Yellow 41) Contains lead and antimony King's Yellow (Yellow 39) Contains arsenic

StrontiumYellow (Yellow 32) Contains strontium and chromates

Zinc Yellow (Yellow 36) Contains chromates

Chrome Green (Milor Green, Prussian Green, Green 15) Contains chromates

24 Emerald Green (Paris Green, Vienna Green, Green 21) Contains arsenite

Scheele's Green (Schloss Green, Green 22) Contains arsenite

Cobalt Violet (Violet 14) Contains cobalt and arsenite

FlakeWhite (CremnitzWhite, Lead White, White 1) Contains lead

Lithopone (White 5) Contains zinc sulfide

Zinc SulfideWhite (White 7) Contains zinc sulfide

Witherite (White 10) Contains barium AntimonyWhite (White 11) Contains antimony Antimony Black Contains antimony sulfide

Possibly toxic pigments- Avoid unless necessary Vermilion (Cinnabar, Red 106)

Contains mercury compounds CadmiumRed (Red 108) Contains cadmium

CadmiumOrange (Orange 20) Contains cadmium CadmiumYellow (Yellow 37)

Contains cadmium Cobalt Yellow (Aureolin, Yellow 40) Contains cobalt Cobalt Green (Green 19) Contains cobalt

ChromiumOxide Green (Olive Green, Permanent Green, Green 17) Contains chromic oxide Viridian (Emeraude Green, Green 18) Contains chromic oxide

Prussian Blue (Iron Blue, Milori Blue, Bronze Blue, Blue 27) Contains cyanide compounds Antwerp Blue (Blue 27) Contains cyanide compounds Cobalt Blue

(Kings Blue, Blue 28) Contains cobalt Manganese Blue (Blue 33) Contains

manganese Manganese Violet (Permanent Mauve, Violet 16) Contains manganese and barium Potentially toxic pigments- Use caution

Lithol Red (Red Lake R, Red 49) Sometimes contaminated with soluble barium

Nickel Azo Yellow (Green Gold, Green 10) Contains nickel

Barium White (Blanc Fixe, White 21) Sometimes contaminate with soluble barium

Note: If paint is listed as a hue, for example, Cadmium Yellow *Hue*, then that means that the paint is made of derivatives to look like Cadmium and it is usually nontoxic.