

HIST GU4962  
**Making and Knowing in Early Modern Europe:  
Hands-On History**  
**Mondays 10:10am-12:00pm**

**Instructor:**

Prof. Pamela Smith

**Office:** Fayerweather 605

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This course is associated with the [Making and Knowing Project](#) of the [Center for Science and Society](#) at Columbia University. Please sign up for announcements for both on the websites!

## DESCRIPTION

This course introduces students to the materials, techniques, contexts, and meanings of skilled craft and artistic practices in early modern Europe (1350-1750), in order to reflect upon a series of topics, including craft knowledge and artisanal epistemology; the intersections between craft and science; and questions of historical methodology in reconstructing the material world of the past. The course will be run as a “Laboratory Seminar,” with discussions of primary and secondary materials, as well as hands-on work.

The second full-semester lab seminar to use the published edition of Fr. 640, [Secrets of Craft and Nature in Renaissance France](#)\*, as its focus, it will test the use of the Edition in a higher education classroom to inform the development of Phase II of the Making and Knowing Project - a *Research and Teaching Companion*. Students’ final projects (exploratory and experimental work in the form of digital/textual analysis of Ms. Fr. 640, reconstruction insight reports, videos for the Companion, or a combination) will be published as part of the Companion or the [Sandbox](#).

*\*Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, edited by the Making and Knowing Project, Pamela H. Smith, Naomi Rosenkranz, Tianna Helena Uchacz, Tillmann Taape, Clément Godbarge, Sophie Pitman, Jenny Boulboulé, Joel Klein, Donna Bilak, Marc Smith, and Terry Catapano (New York: the Making and Knowing Project, 2020), <https://edition640.makingandknowing.org>.*

**Making and Knowing on Twitter:** You can follow the Project on Twitter [@MakingKnowing](#) and tweet any photos from your hands-on activities (we will re-tweet).

# ASSIGNMENTS AND EVALUATION

## Evaluation

The following components (described below) account for the total grade in the course:

- 15% Participation and class discussion
- 10% Presentation on Historical Culinary Recipe Reconstruction
- 35% Field Notes (for each hands-on lab activity)
- 40% Final Project

## Assignments

- Working in groups, prepare and present a powerpoint on your Historical Culinary Recipe Reconstruction.
- Weekly for each hands-on activity: record your field notes and reflect on hands-on activities.
- Final Project

## Class Discussion

All students are expected to come prepared for the discussion sessions by completing all the reading and contributing to class discussion.

## Field Notes and Hands-on Assignments

Most weeks include a hands-on activity. Students should plan to spend about 5 hours/week outside of the class meetings on lab and homework, in addition to preparing for class discussion. Students will keep Field Notes (in written, visual, or podcast form) on their experiences and experiments, documenting their work. In order to contribute to the Making and Knowing archive of student work, all field notes will be entered in Google Drive in the Spring 2022 Field Notes folder, and photos will be uploaded to the photo repository, <https://www.flickr.com/photos/128418753@N06>.

## Final Project

The culmination of the semester is a Final Project. The Projects should, in some way, serve as companion pieces to the Digital Critical Edition, *Secrets of Craft and Nature*, or form a part of the Making and Knowing Project's *Research and Teaching Companion to Secrets of Craft and Nature*. These exploratory and experimental projects will help to brainstorm, design, and implement alternative paths by which to access the material included now in the Edition and/or provide other forms of disseminating and engaging with the themes. Unlike print publications, open-access digital publications do not have an institutional framework by which they are discovered and disseminated. It is thus important to come up with alternative paths by which the digital edition can be accessed, discovered, disseminated, and, ultimately, made sustainable through use. Throughout the semester, you will work closely with the course instructors and the

Making and Knowing team to develop potential areas of exploration that you are interested in pursuing for the Final Project.

Your Final Projects will be published as part of the *Research and Teaching Companion* (RTC) or the [Sandbox](#).

## READINGS

**Required to acquire** (available at Book Culture, or via Abebooks.com, amazon.com, etc.):

- Cennino Cennini, *The Craftsman's Handbook, 'Il Libro dell'Arte'*, trans. by Daniel Thompson (New York: Dover, 1960).
- Samuel Quiccheberg, *The First Treatise on Museums. Samuel Quiccheberg's Inscriptiones 1565*, trans. Mark A. Meadow and Bruce Robertson (Getty Research Institute, 2013).

Book Culture encourages students to order on their website (see below), even if you wish to pick up your order in the store. You can arrange for hassle-free in-store pickup, usually within 24 hours:

- *The First Treatise on Museums: Samuel Quiccheberg's Inscriptiones, 1565*
- *The Craftsman's Handbook*

**These are useful as comparison artist/artisan writings (but not required):**

- Theophilus, *The Various Arts. De Diversis Artibus*, ed. and trans. Hawthorne (Dover, 1980).
- Benvenuto Cellini, *Two Treatises*, trans. C. R. Ashbee (repr. 2006).
- Mary P. Merrifield, *Medieval and Renaissance Treatises on the Arts of Painting: Original Texts with English Translations* (Courier Dover Publications, 2012).
- Giorgio Vasari, *On Technique* (Dover, 1960).
- Karel van Mander, *The Lives of the illustrious Netherlandish and German painters, from the first edition of the Schilder-boeck* (Doornspijk: Davaco, 1994–1999).

**Relevant Readings Folder** (this folder contains hundreds of articles and book excerpts relevant to the themes of this course - if looking for something in particular, it is best to search)

## COURSE MATERIALS

- All course materials are contained in this syllabus and the Google Drive Folder “Course Files” from the Making and Knowing Project’s Google Account
  - See Week 1 follow-up about how to gain full access.
  - If you have any questions or problems, please contact Naomi AND Caroline.
- All Field Notes are found in the folder: Spring 2022 Field Notes

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## SCHEDULE OVERVIEW (semester at-a-glance)

Week: Theme	Monday Date	Notes and Assignments
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		<i>Tues Jan 18 first day of classes</i>
Week 1: Introduction <b>FW513</b>	Jan 24: First day of class	
Week 2: Get to know <i>Secrets of Craft and Nature</i> <b>FW513</b>	Jan 31: Scavenger hunt discussion, into to assignments	<i>Fri Jan 28 course drop deadline. Access to course materials, and scavenger hunt</i>
Week 3: Reconstruction of Historical Techniques <b>FW513</b>	Feb 7: HCR presentations	Prepare presentation <b>Receive sourdough starter</b>
Week 4: Assignments <b>FW513</b>	Feb 14: Assignments, field notes, final projects	Begin Field Notes and baking bread
Week 5: Embodied Knowledge <b>FW513</b>	Feb 21: Discussion of readings	<i>Tues Feb 22 withdrawal deadline. Last day to drop.</i>
Week 6: Collecting Nature and Art <b>FW513</b>	Feb 28: Discussion of readings	
Week 7: Molding and Casting <b>Chandler 260</b>	<b>Mar 7: Casting into bread molds</b>	<i>Mon March 7 midterm date. Bring bread molds to class</i>
Week 8: NO CLASS	Mar 14 - NO CLASS (academic holiday)	<i>Mon Mar 14 - Fri Mar 18 (university holiday)</i>
Week 9: Final Projects Share <b>FW513</b>	Mar 21: <b>Final Projects Share</b>	<i>Thurs Mar 24 last day to pass/fail. Final Project Ideas reports</i>
Week 10: Nature, Art, & Imitation <b>FW513</b>	Mar 28: Discussion of readings	
Week 11: Transforming Materials: Pigments and Paints (part I) <b>FW513</b>	Apr 4: Intro to pigments and paint	Search Ms. Fr. 640
Week 12: Transforming Materials: Pigments and Paints (part II) <b>Chandler 260</b>	<b>Apr 11: Lake making</b>	<b>Wed Apr 13: FINAL PROJECT DRAFTS DUE</b>
Week 13: Final Project Exchange <b>FW513</b>	Apr 18: Final Project Draft Exchange	Read over all drafts and comment
Week 14: Transforming Materials: Pigments and Paints (part III) <b>Chandler 260</b>	<b>Apr 25: Painting pigments</b>	Prepare pigment sample card

Week 15: Craft and Science <b>FW513</b>	May 2: Discussion of readings	
	May 9: NO CLASS Reading week	<i>Fri May 6 - Fri May 13 - FINALS</i>
<b>DUE MAY 13: Final Projects must be submitted by 11:59PM ET</b>		

## Week 1: January 24

### Introduction

#### JANUARY 24: IN CLASS - BY ZOOM

10:10–10:30 Introductions all around

10:30–11:15 Introduction to the Making and Knowing Project

11:15–12pm Review syllabus, overview of assignments, Field Notes, and Digital Protocols

- 2022 Digital Protocol Resource Page
- Flickr
- SIGN UP FOR HANDS-ON SESSIONS IN THE LAB (March 7, April 11, and April 25)

#### FOLLOW UP: Week 1

##### 1) IMPORTANT: Complete by Fri January 28—this is required to access course materials

- Please fill out the Student Information Form which will ask you for information in order to grant you access to the collaborative course files.
  - An email explicitly ending in *@gmail.com* is required.
  - After completing this form, you will shortly (but not immediately) receive an email invitation from the M&K Google Account to view the “Course Files” folders.
- Once you have received confirmation, please make sure you can view the Google Drive folder. (make sure you are accessing with your *@gmail.com* account)
- If you have any questions or problems, please contact Naomi AND Caroline.

##### 2) Explore and Sign In

- Once you have access to the collaborative files, begin exploring the resources that will be discussed next week
- Sign in to [Flickr](#) to make sure you have access (this is where you will eventually upload your photos and videos)

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## Week 2: January 31

### Get to know *Secrets of Craft and Nature*

#### REQUIRED READING/ACTIVITY

Required Reading and Viewing:

- Pamela H. Smith, “Making the Edition,” In *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640*, edited by Making and Knowing Project et al. (New York: Making and Knowing Project, 2020), [https://edition640.makingandknowing.org/#/essays/ann\\_329\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_329_ie_19).
  - Be sure to watch the M&K lab videos embedded in the essay.
- Pamela H. Smith, “An Introduction to Ms. Fr. 640 and its Author-Practitioner.” In *Secrets of Craft and Nature in Renaissance France*, [https://edition640.makingandknowing.org/#/essays/ann\\_300\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_300_ie_19).
- Colin Debuiche and Sarah Muñoz, “Ms. Fr. 640: The Toulouse Context,” translated by Philippe Barré and Christine Julliot de la Morandière, in *Secrets of Craft and Nature in Renaissance France*, [https://edition640.makingandknowing.org/#/essays/ann\\_336\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_336_ie_19).

### Required Activity:

Browse *Secrets of Craft and Nature*: <https://edition640.makingandknowing.org>.

- **Explore** each menu item
- **Complete** the following two scavenger hunts in the Edition
  - Pick three of the following terms, and use the search bar to search the manuscript: “mercury,” “bread,” “rat,” “dog,” “cuttlefish,” “saliva,” “garlic,” “blood,” “rosemary,” “milk,” “horse,” “earwax”
- Browse the results and select one of the occurrences in the manuscript that you find interesting. Please note the page number (e.g., fol. 76v) and URL (e.g., <https://edition640.makingandknowing.org/#/folios/76v/f/76v/tl>) from which you viewed the recipe or entry containing the term. **Keep notes for discussion.**
  - What is the recipe for? Is it a recipe at all? If not, how would you characterize it? How is the relevant object/material/animal used in the recipe? Was this use or the material surprising to you? How does this manuscript entry relate to a subject you are interested in? Could you follow the entry’s instructions to make this object/material?
  - Is there an essay associated with this entry in the manuscript (click on the beaker icon on the right of the entry)? Does it provide new insights or answer your questions about this recipe?
- Conduct another hunt by browsing the [List of Entries](#) and filtering the list by categories and/or tags. Select an entry or two that you find interesting. **Keep notes for discussion.**

### JANUARY 31: IN CLASS

10:10–11:30 Get into groups of three. Be ready to talk about what you found in the *Secrets of Craft and Nature* scavenger hunt. work together on the Historical Culinary Reconstruction (HCR) assignment for the rest of the week.

11:30–12pm Permission/contribution forms

Historical Culinary Recipe (HCR) Introduction

- Assignment Sheet: Historical Culinary Recipe Reconstruction - start on this immediately - see below under Week 3 - it is **DUE ON Feb 7**.

### FOLLOW UP: Week 2

Start immediately on the HCR with your partners

- Make sure to do the reading/watching (at the top of the assignment sheet) before you start cooking.
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## Week 3: February 7

### Reconstruction of Historical Techniques

#### REQUIRED READING/ACTIVITY

- Prepare a Google Slide or Powerpoint presentation of your HCR inside the personal Spring 2022 Field Notes folder belonging to a member of your group.
  - Your presentation must be 10 minutes max on Feb 7
  - Practice delivering the presentation so that we can keep to time in class.
- You are responsible for sourcing and purchasing your own materials. If this presents any hardship for you, please speak to us about it before you buy anything. We may be able to reimburse you for -- or purchase for you -- some of the materials.
  - Check the OED (*Oxford English Dictionary*) for etymological info about words, e.g., biscuits

#### FEBRUARY 7: IN CLASS

10:10–11:15 Google Slide Presentations of HCR process and results

11:15–12pm Commentary on the results (and consumption, if possible and safe to do)  
**Hand out sourdough starter**

#### FOLLOW UP: Week 3

- Reconstruction Thoughts
    - Add at least one comment/thought, etc.
  - **Bread making (for bread molds, due Mar 7)**
  - Over the coming week, learn to make bread! Start as soon as possible.
  - You will use this bread to prepare your bread molds for class on **Mar 7**
    - Familiarize yourself with the Assignment Sheet: Bread Molding.
  - Start early enough that you can bake more than once—you will need to experiment (and you will want to eat some of it!)
  - You will need to research the ingredients and process of making sixteenth-century bread.
  - Remember to document your process: keep notes and reflections (Field Notes will be discussed next week) and take copious pictures as you learn to bake.
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## Week 4: February 14

### Assignments, Field Notes, and Final Projects

#### FEBRUARY 14: IN CLASS

10:10–10:30 Discussion of HCR reflections, bread making, Reconstruction Thoughts

10:30–10:45 Bread Molding in Fr. 640: [Fol. 140v](#)

- 10:15-11:15 Intro to Final Projects
- Look at the [Sandbox](#)
  - Decide on groups (for those of you who plan to work in groups)
- 11:15–12 Discussion of “Field Notes” and note-taking practice  
Introduction to Digital Protocols & Flickr

## **FOLLOW UP: Week 4**

### **Begin taking Field Notes**

- All Field Notes are kept in the Google Drive Folder, Spring 2022 Field Notes (make sure you are accessing with your @gmail.com account)
- Review:
  - Field Notes Checklist
  - Field Notes Tutorial
  - Review the information about our Flickr account and protocols

### **Due Mar 7: Breadmolding**

- Assignment Sheet: Bread Molding
  - Keep baking bread!
  - Choose an object to press into the bread to create a breadmold.

### **Final Projects**

- Begin contemplating ideas for your Final Project
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## **Week 5: February 21 Embodied Knowledge**

### **REQUIRED READING/ACTIVITY**

#### **Required reading:**

- Tillmann Taape, “The Body and the Senses in Ms. Fr. 640: Towards a ‘Material Sensorium,’” in *Secrets of Craft and Nature in Renaissance France*, [http://edition640.makingandknowing.org/#/essays/ann\\_302\\_ie\\_19](http://edition640.makingandknowing.org/#/essays/ann_302_ie_19).
- Emma Le Pouésard, “Pain, Ostie, Rostie: Bread in Early Modern Europe,” in *Secrets of Craft and Nature in Renaissance France*, [http://edition640.makingandknowing.org/#/essays/ann\\_046\\_fa\\_16](http://edition640.makingandknowing.org/#/essays/ann_046_fa_16).
- Emma Le Pouésard, “Bread as Mediating Material: Tactile Memory and Touch in Ms. Fr. 640,” In *Secrets of Craft and Nature in Renaissance France*, [https://edition640.makingandknowing.org/#/essays/ann\\_050\\_fa\\_16](https://edition640.makingandknowing.org/#/essays/ann_050_fa_16).
- Ann-Sophie Lehmann, “Wedging, Throwing, Dipping and Dragging – How Motions, Tools and Materials Make Art,” *Folded Stones*, eds. Barbara Baert and Trees de Mits (Institute for Practice-based Research in the Arts: Ghent 2009), pp. 41-60.
- Raymond Tallis, “Grasping the Hand,” in *The Hand: A Philosophical Inquiry into Human Being* (Edinburgh: Edinburgh University Press, 2003), 21–43

#### **Optional further reading:**



- Erin O'Connor, "Embodied knowledge in glassblowing: the experience of meaning and the struggle towards proficiency," *Sociological Review* (2007): 126-141.
- Julian Thomas, "Phenomenology and Material Culture," in *Handbook of Material Culture*, ed. Christopher Tilley et al. (Sage 2006), 43-59.
- Tim Ingold, *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill* (London and New York: Routledge, 2000), chs. 18-19 (pp. 339-361).

## **FEBRUARY 21: IN CLASS**

10:10–11:30 Discussion of the readings.

- How did the readings help you to think about the experience of kneading, rising, and baking bread? Or vice versa?
- Be ready to talk about your failures and any interesting insights from your failures, as well as any other observations about the experiences.

11:45–12pm Questions about field notes, bread baking, final projects

## **FOLLOW UP: Week 5**

- Continue developing ideas for your Final Project
- Continue your Field Notes
- Sign up for casting session in the lab
- **Reminder for Mar 7:** Have your bread molds ready to be cast into
  - Choose objects to press into the bread to create a breadmold.
  - Prepare your breadmolds for Mar 7. Be ready to show your molds and to begin the casting process in class.

## **Week 6: February 28**

### **Collecting Nature and Art**

## **REQUIRED READING/ACTIVITY**

### **Required reading for discussion**

- Samuel Quiccheberg, *The First Treatise on Museums. Samuel Quiccheberg's Inscriptiones 1565*, trans. Mark A. Meadow and Bruce Robertson (Getty Research Institute, 2013).
- Colin Debuiche, "Ms. Fr. 640 and the Béthune Collection," translated by Christine Julliot de la Morandière and Philippe Barré, in *Secrets of Craft and Nature in Renaissance France*, [https://edition640.makingandknowing.org/#/essays/ann\\_337\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_337_ie_19).

### **Optional further reading**

- Pamela H. Smith, "Collecting Nature and Art: Artisans and Knowledge in the Kunstkammer," in *Engaging With Nature: Essays on the Natural World in Medieval and Early Modern Europe*, ed. Barbara Hannawalt and Lisa Kiser (University of Notre Dame Press, 2008), 115-136.
- Martin Kemp, "'Wrought by No Artist's Hand': The Natural, the Artificial, the Exotic, and the Scientific in Some Artifacts from the Renaissance," *Reframing the Renaissance:*

*Visual Culture in Europe and Latin America 1450–1650*, ed. Claire Farago (New Haven and London: Yale University Press, 1995), 177–96.

## **FEBRUARY 28: IN CLASS**

10:10–10:30 Bread baking update, and discussion of objects for molding in your bread

10:30–12pm Discussion of readings

## **FOLLOW UP: Week 6**

- Continue your Field Notes
- Continue contemplating ideas for your Final Project
- Sign up for casting session in the lab
- **Mar 7:** Breadmolding - Assignment Sheet: Bread Molding
  - Choose an object to press into the bread to create a breadmold.
  - Prepare your breadmolds for Mar 7. Be ready to show your molds and to begin the casting process in class.
  - WATCH presentation by Environmental Health & Safety on working safely in M&K's lab
- Think about how you have been working at home, baking bread. Review your own workflows and safety procedures.
  - How to undertake hands-on work in a thoughtful and safe way?
  - Reflect on your reconstruction process and think about the materials, tools, and protocols you utilized.
    - M&K has laboratory/studio safety protocols. What are the underlying principles? How do these compare to working at home?

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## **Week 7: March 7 Molding and Casting**

### **REQUIRED READING/ACTIVITY**

**Reminder for Mar 7:** Bring your bread molds to class, ready to be cast into.

- How do your bread molds and your cast objects show traces of your process (successes, failure)? How do we read them as objects?
- Remember to watch the safety video linked about

### **March 7: IN CLASS - MEET IN CHANDLER 260**

Sign up for a casting session

## **FOLLOW UP: Week 7**

- Budget some time to possibly return to the Lab to work with your cast objects
- Turn in a written description about your idea/topic for your Final Project
  - Do not hesitate to reach out to us, even to just talk or brainstorm!
  - **Due Friday, March 11, 9am:** Write a short description of your idea(s)/thoughts - this can be 5-10 sentences, a paragraph, or bullet points

- We will be sending this to Librarian Meredith Levin so that she can prepare a customized research session for us
  - In preparation for our next class session on Monday Mar 21:
    - Be ready to share your ideas with the class
    - Read over each other's ideas and come with feedback
- **Due Monday, March 21, by 11:59pm:** Complete your Field Notes up through Bread Molding (i.e., all activities/field notes and photos so far) on.

## Week 8: March 14

No Class (Spring Break)

## Week 9: March 21 Final Project Share

### MARCH 21: MEET IN BUTLER 523

- 10:10–11:30 Research methods with Librarian Meredith Levin (Humanities & History)
- [Hands-on History: Making and Knowing in Early Modern Europe - Research Guides at Columbia University](#)
- 11:30–12pm Share ideas on Final Project topics with the class

### FOLLOW UP: Week 9

- **Due Monday, March 21, by 11:59pm:** Complete your Field Notes up through Bread Molding (i.e., all activities/field notes and photos so far) on.
- Begin researching/writing towards a draft of your Final Project, draft **due Wed Apr 13**
- Review Meredith's research guide for M&K: [Hands-on History: Making and Knowing in Early Modern Europe - Research Guides at Columbia University](#)
  - Also check out:
    - Online [workshops](#)
    - Librarian drop-in hours, 1-4pm, M-F in Butler 310
- Look at resources/help in the Assignment Sheet: Final Projects

## Week 10: March 28 Nature, Art, and Imitation

### REQUIRED READING/ACTIVITY

#### Required Reading:

- Selections of your choice from Cennino Cennini, *The Craftsman's Handbook*, 'Il Libro dell'Arte', trans. by Daniel Thompson (New York: Dover, 1960).
  - **Choose** your favorite couple of chapters and read for specific things, e.g. language, how instructions are given, materials and how they are transformed, etc., making note of what you find.

- How does Cennini’s book of recipes compare to Ms. Fr. 640? How does it compare to Quiccheberg’s plan for a collection?
- Can you find any of the materials in Ms. Fr. 640 (e.g., those you found in your scavenger hunt) in Cennini?
- **PLEASE NOTE:** this essay contains images and descriptions of preparing dead animals for taxidermy - it may be disturbing to some:
  - Divya Anantharaman and Pamela H. Smith. “[Animals Dried in an Oven](#).” In *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640*, edited by Making and Knowing Project, et al. 2020.
- Isabella Lores-Chavez. “[Imitating Raw Nature](#).” In *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640*, edited by Making and Knowing Project, et al. 2020.

## MARCH 28: IN CLASS

10:10–11:30 Discussion of readings

11:30–12pm Final Project check-ins

## FOLLOW UP: Week 10

- Continue drafting your Final Project; **draft due on Apr 13.**

## Week 11: April 4 Transforming Materials: Pigments and Paints I

### REQUIRED READING/ACTIVITY

#### Required reading:

- Erma Hermens and Arie Wallert, “The Pekstok Papers, Lake Pigments, Prisons and Paint-Mills,” in *Looking through Paintings: The Study of Painting Techniques and Materials in Support of Art Historical Research (Leids Kunsthistorisch Jaarboek XI)*, ed. Erma Hermens (Baarn, The Netherlands: Uitgeverij de Prom, 1998), pp. 269-280 and 287-291.
- Search the translation for “lake,” “brazilwood,” “cochineal,” “platte,” “ronde” in Fr. 640
- **Look through** The making of lake pigments from a variety of materials

#### Further Optional Reading

- Jo Kirby et al, “Chapter 5 - Recipes,” in *Natural Colorants for Dyeing and Lake Pigments: Practical Recipes and their Historical Sources* (Archetype Publications, London, 2014).
- *Natural Colorants* Chapter 3 - Chemistry (chemistry of the lake process)
- Elena Phipps, [Cochineal\\_Red\\_the\\_art\\_history\\_of\\_a\\_color.pdf](#)

## APRIL 4: IN CLASS

10:10–12pm Presentation and discussion

Presentation: Introduction to Pigments & Paints

Presentation: Cochineal Lake: History, Chemistry, and Preparation

Discussion of what you found in your search for “lake,” “brazilwood,” “cochineal,” “platte,” “ronde” in Fr. 640?

### **FOLLOW UP: Week 11**

- Sign up for lab session next week
  - Continue drafting your Final Project; **draft due on Apr 13.**
  - Start preparation for the coming weeks of color making!
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## **Week 12: April 11** **Transforming Materials: Pigments and Paints II**

**MEET IN CHANDLER 260**

### **APRIL 11: IN CLASS**

10:10–10:30 Making of Lake Pigment - Cochineal

10:30–12pm Lake making together in the Lab

### **FOLLOW UP: Week 12**

- Continue your Field Notes
  - **Due Wed Apr 13 at 11:59pm:** Submit a draft of your final project for the Apr 18 Draft Exchange session.
    - Please submit it in the document with your name on it in the Final Project DRAFTS folder by 11:59pm on Wednesday Apr 13.
    - If you are turning in a draft that cannot be submitted as a google doc, please let us know.
  - **Due Sunday April 17:** Read everyone’s drafts and leave comments using Google Drive's commenting function. Be ready to participate in the Draft Exchange session with suggestions and thoughts for your fellow classmates.
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## **Week 13: April 18** **Final Project Draft Exchange**

### **APRIL 18: IN CLASS**

10:10–12pm Discussion of Final Project Drafts

### **FOLLOW UP: Week 13**

- Continue your Field Notes
  - Continue drafting your Final Project, incorporating feedback from the Draft Exchange session
  - Prepare Sample Card for pigment painting
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## Week 14: April 25

### Transforming Materials: Pigments and Paints III

#### MEET IN CHANDLER 260

#### APRIL 18: IN CLASS

- 10:10–10:30 Last steps of lake prep (scrape pigment from filter)  
10:30–12pm Demo: Mulling and painting pigments  
Painting out together

#### FOLLOW UP: Week 14

- Sign up for additional Lab time and/or take materials home for more painting
- Continue experimenting with painting out your pigments at home
  - Review Assignment Sheet: Painting pigments
  - Different types of pigments (organic- cochineal, earth - ochre)
  - Different types of binding media (oil, gum, tempera - egg yolk, glair - egg white)
  - What other types of trials can you do? Painting out a scene? Trying substrates other than paper? Mixing or layering pigments?
  - On fol. 90r, Ms. Fr. 640 makes clear that artists foraged in their surroundings for “things already prepared in nature” that they could use in their work. What experiments can you do with foraged pigments? (See for inspiration: [https://cu-mkp.github.io/sandbox/docs/su21\\_snyder\\_mellon\\_final-project-pigments.pdf](https://cu-mkp.github.io/sandbox/docs/su21_snyder_mellon_final-project-pigments.pdf))
  - Complete Field Notes

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## Week 15: May 2

### Craft and Science

#### REQUIRED READING/ACTIVITY

##### Required Reading

- William Eamon and Françoise Paheau, “The Accademia Segreta of Girolamo Ruscelli: A Sixteenth-Century Italian Scientific Society,” *Isis* 75, no. 2 (1984): 327-42.
- Tillmann Taape, “Experience Will Teach You!: Recording, Testing, Knowing, and the Language of Experience in Ms. Fr. 640.” In *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640*, edited by Making and Knowing Project, et al. [https://edition640.makingandknowing.org/#/essays/ann\\_303\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_303_ie_19).
- Vera Keller, “‘Everything Depends Upon the Trial (*Le tout gist à l’essay*)’: Four Manuscripts Between the Recipe and the Experimental Essay.” In *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640*, edited by Making and Knowing Project, et al, [https://edition640.makingandknowing.org/#/essays/ann\\_320\\_ie\\_19](https://edition640.makingandknowing.org/#/essays/ann_320_ie_19).

##### Further Optional Reading

- Pamela O. Long, *Artisan Practitioners and the Rise of the New Sciences, 1400-1600* (Oregon State UP, 2011), Intro. and ch. 1.
- Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago and London: The University of Chicago Press, 2005, repr. 2018), chs. 1-3.

## MAY 2: IN CLASS

- 10:10–10:30 Pigment painting show-and-tell (bring your pigment cards!)
- 10:30–12pm Discussion of Readings and Conclusions  
Data management review (if needed)

## FOLLOW UP: Week 15

- Complete Field Notes
- Continue drafting your Final Project
- **Due May 9:** Complete all field notes (and media) by 11:59pm
- **Due May 13:** Submit Final Project by 11:59pm to sp22 Final Project SUBMISSIONS
  - **NOTE TO GRADUATING SENIORS:** Final Projects must be submitted by **May 10, 11:59pm**

## Statement on COVID-19

We are all required to uphold the Columbia Community Health Compact. Currently, that mandates that all students, staff, and faculty must wear a suitable facemask inside. University policies and requirements may change during the semester.

## Statement on Academic Integrity

The intellectual venture in which we are all engaged requires of faculty and students alike the highest level of personal and academic integrity. As members of an academic community, each one of us bears the responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity.

Scholarship, by its very nature, is an iterative process, with ideas and insights building one upon the other. Collaborative scholarship requires the study of other scholars' work, the free discussion of such work, and the explicit acknowledgement of those ideas in any work that inform our own. This exchange of ideas relies upon a mutual trust that sources, opinions, facts, and insights will be properly noted and carefully credited.

In practical terms, this means that, as students, you must be responsible for the full citations of others' ideas in all of your research papers and projects; you must be scrupulously honest when taking your examinations; you must always submit your own work and not that of another student, scholar, or internet agent.

Any breach of this intellectual responsibility is a breach of faith with the rest of our academic community. It undermines our shared intellectual culture, and it cannot be tolerated. Students failing to meet these responsibilities should anticipate being asked to leave Columbia.

## **Disability-Related Accommodations**

In order to receive disability-related academic accommodations, students must first be registered with Disability Services (DS). More information on the DS registration process is available online at [www.health.columbia.edu/ods](http://www.health.columbia.edu/ods). Faculty must be notified of registered students' accommodations before exam or other accommodations will be provided. Students who have (or think they may have) a disability are invited to contact Disability Services for a confidential discussion at (212) 854-2388 (Voice/TTY) or by email at [disability@columbia.edu](mailto:disability@columbia.edu).