

HIST G8906
Craft and Science: Making Objects in the Early Modern World
Fall 2018
Monday 10:10 am–2:00 pm
Chandler 260

Co-Instructors:

Prof. Pamela Smith

Dr. Sophie Pitman

Dr. Tillmann Taape

Dr. Tianna Uchacz

DESCRIPTION

This course studies the materials, techniques, settings, and meanings of skilled craft and artistic practices in the early modern period (1350-1750), in order to reflect upon a series of issues, including craft knowledge and artisanal epistemology; the intersections between craft and science; and questions of historical methodology and evidence in the reconstruction of historical experience. The course will be run as a “Laboratory Seminar,” with discussions of primary and secondary materials, as well as text- and object-based research and hands-on work in a laboratory. One component of the [Making and Knowing Project](#) of the [Center for Science and Society](#), this course contributes to the collective production of a transcription, English translation, and critical edition of a late sixteenth-century manuscript in French, Ms. Fr. 640. In fall 2018, the course will focus on the cultural context, materials, and techniques of “making impressions” upon a variety of surfaces, including making reliefs for decoration and for printing, inscribing metal, including engraving and possibly etching. Several entries in the manuscript use what we think of as “print techniques” for metal decoration or making seals and molds, and other entries discuss printers’ type, and make use of prints for image transfer. Students will begin with skillbuilding exercises in pigment making, molding, and then choose a research focus from the entries in the manuscript that cover such topics as draftsmanship, engraving techniques, print transfer, and other topics that intersect with printing and printmaking. The course will be taught this year only in fall 2018.

PREREQUISITE

All participants must complete laboratory safety training. Please see the safety training schedule for the Fall 2018 on the Morningside campus for the next available session (Sept. 21). If you are unable to attend during these times, you can also attend safety training at the medical campus. No registration is required for safety training; you may simply show up and attend (have your

Columbia ID with you). Your attendance will be recorded and stored electronically in the RASCAL system, where you will be able to print a training certificate as proof of training.

ORGANIZATION

This course will be conducted by discussion of readings and hands-on work in the laboratory. Readings will include primary sources and literature drawn from material culture studies, anthropology, history of science and technology, and art history, as well as an introduction to historical reconstruction and to BnF Ms. Fr. 640. Students will contribute to the research on Ms. Fr. 640 by finding and comparing contemporaneous primary sources and discussing their value for a better understanding of the recipes and methods described in Ms. Fr. 640. At the same time, a series of introductory lab sessions on making and materials will be conducted. The course will then turn to the reconstruction of the techniques in Ms. Fr. 640. Using a French transcription and English translation, the laboratory portion of the course will focus each year on a single set of related techniques described in the manuscript. In 2014-15, the focus was on mold making and metalworking, including sand and plaster casting. In 2015-16, the focus was on color making, including dye and paint pigments, coloring woods and metals, varnishes, and artificial gem making. In 2016-17, we examined a variety of contexts for the manuscript, including the regional history of Toulouse, elite collecting in the 16th century, and descriptions and recipes that have to do with “practical natural history” (such as catching and feeding of animals, silkworm cultivation, “anatomy,” taxidermy, and organic dyes made from plants), “practical perspective and optics” (including perspective construction for painters, experiments with mirrors, and observations about the production of visual effects by the application of varnishes, glass, and other materials), and medical recipes. The Project also revisited some of the recipes from previous years, for example, ruby glass, bread molding, wax manipulation, and imitation jasper. In 2017-18, the course focused on ephemeral artworks and the culture of display in the manuscript. In 2018, as noted, the course focuses on “*impression*, print, inscription, relief, and printing.”

Work in the laboratory this semester will include a visit by expert maker, Dr. Ad Stijnman, an expert in printmaking. He will participate in the seminar and lead demonstrations and experiments in the lab, from October 15–26.

On May 14–16, 2019 (Tuesday-Thursday), an international meeting of scholars and expert practitioners (Working Group Meeting) will be held at Columbia in order to review the progress made on the project. Students from the course will be expected to present at this meeting.

ASSIGNMENTS AND EVALUATION

Class Discussion

All students are expected to come prepared for discussion.

Discussion participation accounts for about 10% of the total grade.

Hands-on Assignments

Students will keep field notes (in written, visual, or podcast form) on their experiences and experiments, documenting their experiments in reconstruction, as well as their methodological reflections on the uses of hands-on work and reconstruction as historical sources. They will upload their photos to the [Flickr photo repository](#).

Open lab times will be announced throughout the semester, but will generally be held Monday afternoons after class, Wednesdays, and Fridays. On average, students should expect to spend at least two additional hours in the lab per week.

The laboratory component of the course will be worth 30% of the grade.

Written Assignments

Students will contribute to the decipherment of the text of Ms. Fr. 640, and they will contribute annotations to the translation and critical edition of the manuscript. They will keep Field Notes, and they will make every effort to take part in the final Working Group Meeting to be held in May 2019.

Working in groups, students will contribute two short annotation essays (750-3000 words) to the critical edition, similar to a catalog entry for an exhibition. These essays will make use of a whole range of visual and textual sources, and will integrate the students' laboratory experiences into a written or visual presentation that makes an argument about what research (both textual and material) into the recipe revealed about process, materials, sixteenth-century culture and society, or the identity of the author. One of the most important components of this assignment is the research students undertake on the relationship of recipes in Ms. Fr. 640 to other earlier and contemporaneous recipe collections. Previous year's annotations give students a good idea of our expectations for this assignment. Because the annotations will be published in 2019 as part of the edition's critical commentary, they must be in **publication-ready shape by the final due date**. This is achieved by means of a series of annotation workshops towards the end of the semester.

The annotation assignment comprises 60% of the grade.

Student research essays resulting from this semester are contained in [*Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640.*](#)

- [Black Varnish for Armor](#)
- [La Maison Rustique: Cultivation and the Genre of the Household Manual](#)
- [Ms. Fr. 640 and The Jewell House of Art and Nature \(1594\)](#)
- [Necessary Particulars: Philosophical Reflections on Making and Knowing with Ms. Fr. 640](#)
- [Pinking Satin](#)
- [Polishing and Engraving Stones](#)
- [Tablets](#)
- [Tin and its Uses in Ms. Fr. 640](#)
- [To Corrode and Dissolve: Making Aquafortis in Ms. Fr. 640](#)

- [To Shrink an Object: Bread Molding in Ms. Fr. 640](#)
- [Transferring Images](#)
- [Wax for Seals in Ms. Fr. 640](#)
- [What is Stone in Ms. Fr. 640?](#)

READINGS

The following course books (only those marked **Required**, i.e., **only 4 of the books listed below**) are available at Book Culture (112th between Broadway and Amsterdam).

These provide an introduction to collecting and objects:

- **Required:** Samuel Quiccheberg, *The First Treatise on Museums. Samuel Quiccheberg's Inscriptiones 1565*, trans. Mark A. Meadow and Bruce Robertson (Getty Research Institute, 2013)
- Lorraine Daston and Katharine Park, *Wonders and the Order of Nature* (Zone, 1998)
- Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine* (1995)

These provide an introduction to the likely locale of Ms. Fr. 640's compilation:

- Robert Schneider, *Public Life in Toulouse* (Cornell, 1989).
- William Beik, *A Social and Cultural History of Early Modern France* (Cambridge, 2009)

These provide an introduction to the history of the relationship between craft and science:

- **Required:** Pamela O. Long, *Artisan Practitioners and the Rise of the New Sciences, 1400-1600* (Oregon State UP, 2011)
- **Required:** 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)

These are useful as comparison artist/artisan writings:

- **Required:** Cennino Cennini, *The Craftsman's Handbook, 'Il Libro dell'Arte'*, trans. by Daniel Thompson (New York: Dover, 1960)
- 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)

Other works relevant to this course:

- Tim Ingold, *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill* (London and New York: Routledge, 2000)
- Robert Tarule, *The Artisan of Ipswich: Craftsmanship and Community in Colonial New England* (Johns Hopkins University Press, 2004)
- Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook (eds.), *Ways of Making and Knowing* (University of Michigan Press, 2014)

- Christy Anderson, Anne Dunlop, and Pamela H. Smith, *The Matter of Art: Materials, Practices, and Cultural Logics, c. 1250-1800* (Manchester University Press, 2014).

As you do your weekly readings, please make use of the “Discussion Questions” documents linked here. These are meant to be a place where everyone can raise and puzzle through some of the issues in the readings; we use these documents to guide and supplement class discussions. Please add any points you want to raise beneath the relevant readings, or add more general points in the section at the top. Feel free to make this a discussion space: comment or expand on the points of your colleagues.

SCHEDULE

NOTE: Class is typically held in one of two locations: the Center for Science and Society seminar room, **Fayerweather 513** OR the Making and Knowing Lab, **Chandler 260**. Be sure to check the syllabus schedule below for the most up-to-date information on class location.

Week 1 (Sept. 10): Introduction & the Making and Knowing Project

Skillbuilding: Verdigris growing (collect components in class and take them home)

IN PREPARATION

Required: Administrative To Dos

- Please fill out the Google Drive access form which will ask you for information in order to grant you access to these course collaborative spaces.
 - For reference, please consult HIST G8906 GD Introduction and information on the Project Google Drive

Explore [The Making and Knowing Project Website](#)

- Read the website thoroughly, making sure you understand the four components of the project

Browse [the manuscript pages of BnF Ms Fr 640](#) through the BnF on Gallica

- Browse (or read!) the compiled pdfs of the Project’s transcribed and translated text and refer to the “about” document that explains what these pdfs are and how they are created:
 - Please read - About consolidated pdfs
 - The diplomatic (i.e., verbatim) French transcription
 - The English translation
 - Explore the prototype minimal edition of the manuscript (this is the most up-to-date version of the manuscript, but has a few bugs and cannot be read sequentially. Be sure to explore the menu in the upper left hand corner.)

Required Watching

- [The Making and Knowing Project Lab Videos](#) (Watch all 11 videos in the playlist (00-10) - c. 40 minutes)

Required Reading

- Pamela H. Smith and The Making and Knowing Project, “Historians in the Laboratory: Reconstruction of Renaissance Art and Technology in the Making and Knowing Project,” *Art History*, special issue on Art and Technology (2016)

Recommended Reading

- Watch the [introduction to the manuscript and the project](#) (ca 1 hour) or read Pamela H. Smith, “In the Workshop of History: Making, Writing, and Meaning,” *West 86th: A Journal of Decorative Arts, Design History, and Material Culture*, vol. 19 (2012): 4-31.
- If you are new to the history of science, you should read Pamela H. Smith, “Science on the Move: Recent Trends in the History of Early Modern Science,” *Renaissance Quarterly*, 62 (2009): 345–375.
- For more on the Project and its methods, see Donna Bilak, Jenny Boulboulle, Joel Klein, and Pamela H. Smith, “The Making and Knowing Project - Reflections, Methods, and New Directions,” in *New Directions in Making and Knowing*, a special issue guest edited by Smith of *West 86th: A Journal of Decorative Arts, Design History, and Material Culture*, 23.1 (2016): 35-55.

Contribute any questions, thoughts, or connections stimulated by the preparatory readings and videos to the this week’s Discussion Questions document which functions as a discussion forum and repository of ideas for both students and instructors. There will be a new document for each week’s readings.

IN CLASS

BRING YOUR LAPTOP TO CLASS

- | | |
|-------------|---|
| 10:10–10:35 | Introductions all around. The course in brief, expectations, skills, and your contribution to the project. Come with questions! Peruse the lab results posters. |
| 10:35–12:05 | Lecture on the Making and Knowing Project by P. Smith. |
| 12:05–12:25 | Break |
| 12:25–12:50 | Navigating and reading BnF Ms. Fr. 640. |
| 12:50–1:15 | Discussion of Home Culinary Reconstruction Assignment (division into groups)--see instructions under Week 2 Preparation. Due Monday, September 17. |
| 1:15–2:00 | Introduction to MSDS (search for “verdigris,” copper, vinegar on ChemWatch Safety Data Sheets (SDS) - Online Search (must be connected to Columbia Network). Be sure to take home your copper, jar, and string! |

FOLLOW UP

Review Lab Procedure Reminders

Use the information in the Verdigris Home Experiment assignment sheet for making/growing verdigris. Be sure you have your copper, a jar, string/twine. Start your verdigris growing immediately. We will likely ask you to bring the result to class (the copper and growths in a ziplock bag) later in the semester (timing TBD).

Required Reading/Research on verdigris growing:

- look up “verdigris” in
 - the pigment glossary and in linked websites listed in pigment resources, esp.:
 - the COLOUR ConTEXT database
 - Technical Art History Website, University of Delaware:

- [CAMEO: Conservation & Art Materials Encyclopedia Online](#) (explore, and check “Materials database”)
- Chemwatch issues to note down for discussion in class next week: specific hazards, PPE requirements, safe disposal, and anything else you think important
- Familiarize yourself with the GR8906 Resources Document - click on links to get an overview of some of our resources - this is a very useful document that you will need to refer to throughout the semester.

(NOTE: **Thursday, September 13**: Last day for students to join the class from the Waitlist. The Waitlist tool will close at 9:30 p.m.)

Week 2 (September 17): Reconstruction

Skillbuilding: Historical culinary reconstruction

IN PREPARATION

Start on the Historical Culinary Recipe Reconstruction (HCR) right away, by reading the HCR assignment carefully, exploring and using the websites listed on the assignment sheet to search for comparable recipes in contemporaneous sources, and doing the following reading/watching **BEFORE** starting your reconstruction:

Required Reading and Watching:

- Ken Albala, “Cooking as Research Methodology: Experiments in Renaissance Cuisine,” *Renaissance Food from Rabelais to Shakespeare: Culinary Readings and Culinary Histories*, ed. Joan Fitzpatrick (Aldershot, UK: Ashgate, 2010), pp. 73–88.
- Lawrence Principe, “Chymical Exotica in the Seventeenth Century, or, How to Make the Bologna Stone” *Ambix* 63 (2016): 118-44.
- Ad Stijnman, “Style and technique are inseparable: art technological sources and reconstructions,” *Art of the Past. Sources and Reconstructions. The proceedings of the First Symposium of the Art Technological Source Research Study Group*, ed. by Mark Clarke, Joyce H. Townsend, and Ad Stijnman (Amsterdam: Archetype, 2005): 1-8.
- [Syrup of Violets and Science](#) video
- Read over the HCR resource guide and the [CU Library Tool](#) compiled by Meredith Levin specially for this course

Recommended reading

- For an example of an exemplary reconstruction experiment by a conservator, see Maartje Stols-Witlox, “Sizing layers for oil painting in western European sources (1500-1900): historical recipes and reconstructions,” *Proceedings of the Second ATSR Symposium* (2008), pp. 148-163.

Contribute to this week’s Discussion Questions document

Execute your HCR

Prepare a Google Slide presentation of your HCR inside the personal Field Notes folder belonging to one of your group-mates. Your presentation must be 10 minutes max; **practice delivering your presentation** so that we can keep to time in class on Monday.

IN CLASS

Bring the material results of your HCR. We will consume them, if safe!

- 10:10–12:00 Student presentations (and consumption of the results),
12:00–12:45 Introduction to field and lab notes with Dr. Joseph Ulichny, Chemistry, and Dr. Brian Boyd, Anthropology
12:45–1:05 Break
1:05–1:30 FA18 reconstruction template construction
1:30–2:05 Review of “Student Files” folder and the GR8906 Resources Document (your guide to resources. Discussion of Field Notes protocols. Practice by linking from Google Slides HCR presentation within the Field Notes Folder belonging to the other group-mate. Fill out community profiles.
2:05–2:10 Distribution of the sourdough starter

FOLLOW UP

- Begin a field notes page in your folder for your Verdigris assignment. Please review the Field Notes Tutorial. Any photos should be uploaded to Flickr after being named according to the appropriate protocol and then inserted into the document. Please review the information about our Flickr account and protocols on the HIST GR8906 Digital Protocol Resource Page
- Familiarize yourself with the Bread Molding assignment. Start feeding your starter and baking (or learning to bake) bread this coming week. You will need to research the ingredients and process of making sixteenth-century bread, so keep detailed field notes and take copious pictures as you learn to bake bread. **Bread molds due Week 4, October 1, in class.**

Week 3 (Sept. 24): Prints and the printed page

Skillbuilding: RBML/Conservation lab

IN PREPARATION

Learn to bake bread! Prepare your bread molds for next week, according to the Bread Molding assignment. Don't bring the bread in this week - as we will be in the library!

Required readings

PRINTING

- Landau, D. and Parshall, P. (1994) *The Renaissance Print: 1470–1550* (New Haven: Yale University Press), pp. 1–32
- Sachiko Kusukawa (2011) *Picturing the Book of Nature*, Ch. 1 (Techniques and Craftsmen).
- Ad Stijnman, “Stradanus’ Printshop,” *Print Quarterly*, vol. 26 (2010), no. 1 (March), 11–29

- Watch this short film about the [woodblocks used in Newton's Principia](#)

RECIPES

- Francisco Alonso-Almeida, "Genre conventions in English recipes, 1600-1800," *Reading and Writing Recipe Books, 1550-1800*, Michelle DiMeo and Sara Pennell (Manchester: Manchester University Press, 2013), pp. 68-90.
- Pamela Smith, "What is a Secret? Secrets and Craft Knowledge in Early Modern Europe," *Secrets and Knowledge in Medicine and Science, 1500-1800*, ed. by Elaine Leong and Alisha Rankin (Ashgate, 2011): 47-66.
- Read over the HCR resource guide and the [CU Library Tool](#) compiled by Meredith Levin specially for this course. You will meet Meredith today, so you should compile questions.

Recommended readings

- If you are not familiar with printing terminology, this is a good guide: Goldman - Prints, Drawings, Watercolors A Guide to Technical Terms.pdf
- William Eamon, "How to Read a Book of Secrets," ch. 1, *Secrets and Knowledge in Medicine and Science, 1500-1800*, ed. by Elaine Leong and Alisha Rankin (Ashgate, 2011): 23-46
- *Ambix*, 63, 2016 - Issue 2: From the Library to the Laboratory and Back Again: Experiment as a Tool for the History of Science. (This special issue contains good examples of historians reconstructing technical processes from "recipes," e.g., saltpeter making.)
- Sara Pennell "Perfecting Practice? Women, Manuscript Recipes and Knowledge in Early Modern England," ed. by Victoria E. Burke and Jonathan Gibson, *Early Modern Women's Manuscript Writing: Selected Papers from the Trinity/Trent Colloquium* (Aldershot: Ashgate, 2008)
- Elaine Leong, "Making Medicines in the Early Modern Household," *Bulletin of the History of Medicine* 82(1) (2008): 145-168

Contribute to the Discussion Questions document

IN CLASS

Meet just inside the entry kiosk in Butler Library by 10:00 am

10:10-11:45: Conservation lab

12:20-2:00: RBML

(Meet Meredith Levin, Western European Humanities Librarian)

FOLLOW UP

Bread making!

Prepare your bread molds, according to the Bread Molding Assignment. Continue observing your verdigris and keeping field notes.

Week 4 (October 1): Printing, printmaking, *impression* in Ms. Fr. 640 part I

Skillbuilding: Bread molding

IN PREPARATION

- BRING YOUR BREAD MOLDS TO CLASS
- Look up MSDS sheets for beeswax, sulfur, linseed oil

Required reading:

- Schmidt - Origins of European Printmaking - The Multiple Image.pdf
- Dackerman - Prints and the Pursuit of Knowledge - Prints as Instruments.pdf.
 - Read esp. 19–35. Read the catalogue entries if you have time
- Vasari, On Technique, pp. 273-84
- An example from the 1580s of artisanal techniques and knowledge moving from one domain to another--like techniques of etching armor and niello moving to print technologies: https://www.metmuseum.org/toah/hd/blak/hd_blak.htm
- Explore [Making of an English Broadside Ballad](#) - interactive journal, including section on printing, reflections on making, etc.
- Emma Le Pouésard, “Pain, Ostie, Rostie: Bread in Early Modern Europe,” Annotation, Fall 2016

Contribute to the Discussion Questions document

IN CLASS

- 10:10–11:30 Discussion of readings (Verdigris follow-up discussion.)
Discussion of digital component of Project
Discussion of GD and Student Files—how are you finding navigation?
Troubleshoot student navigation within
- Student Files And Reference folders
 - BnF Folders: Glossaries, Dictionaries and Reference
 - Prior year annotations in BnF folder
 - Working Group Meeting Presentations
- Discussion of MSDS related to Bread Molding
- 11:30 – 12:00 Safety training
- 12:00 – 12:30 Jon Paul Aponte for Fire Safety and Extinguisher Training
- 12:30 – 12:45 Break
- 12:45 – 2:00 Bread molding

Week 5 (October 8): Printing, printmaking, *impression* in Ms. Fr. 640 part II

Skillbuilding: Image transfer to print blocks/plates; linocut

IN PREPARATION

Collect your thoughts about the experience of breadmolding. We will compare to other types of impression technologies today.

Required reading

- **Search** the manuscript (use PDFs) for examples of entries that connect to the theme of printmaking and impressions and their materials. **Make a list** of these entries to share and discuss.
- Check Cennino Cennini, *The Craftsman's Handbook, 'Il Libro dell'Arte'*, trans. by Daniel Thompson (New York: Dover, 1960) for entries which shed light on printmaking/making impressions and design transfer
- Freyda Spira, "Between Paper and Sword: Hopfer and the Translation of Etching"
- Wenrui Zhao, "Reverse Painting on Glass"
- Nina Elizondo-Garza, "Stucco"

Recommended:

- Freyda Spira, "Hopfer und die geätzte Dekoration von Rüstungen"

Contribute to the Discussion Questions document

IN CLASS

Meet in Fayerweather

10:10–10:45 Discussion of readings and breadmolding results

10:45–11:25 Discussion of what you found in Ms. Fr. 640 and Cennino; presentation of potential annotation topics (PHS)

11:25–11:45 Break

11:45–2:00 Image transfer and linocut; take home woodblock to grid

SPECIAL FIELD TRIP TO MET, October 12, 9am – 12 noon

- Friday, October 12, meet in front of Met at 8:50 am
 - Visit to Arms & Armor with Pierre Terjanian, 9–10:30
 - Visit to Prints with Freyda Spira, 10:30–12 noon

Week 6 (October 15): Skillbuilding with Expert Maker Ad Stijnman

EXPERT MAKER RESIDENCY:

[Ad Stijnman \(Fellow of the Royal Historical Society in London\)](#)

Visiting classes in Book History

Skillbuilding: woodblock and engraving

Annotations: begin planning

IN PREPARATION

Grid your woodblock

Required readings

- Ad Stijnman, *Etching and Engraving* (2012), pp. 10–22, 23–74, 154–160
- Stijnman - Hercules Segers's Printmaking Techniques
- Ad Stijnman, “The Art Technological Source Research Working Group (ATSR) and the Dissemination of Information on Art Technology”

Recommended readings

- Ad Stijnman, *Etching and Engraving* (2012), pp. 1–10, 162–181, 196–208.

Contribute to the Discussion Questions document

IN CLASS

10:10–11:00 Presentation by Ad Stijnman
11:00–11:30 Discussion of readings
11:30–12:00 Break
12:00–2:00 Introduction to woodblock and engraving techniques

****SPECIAL VISITS/AND OR SKILLBUILDING SESSIONS WITH AD**

- 16 OCT [Ad Stijnman \(Fellow of the Royal Historical Society in London\)](#): “Cut Brightly: Colour Intaglio Printed Illustrations 1475–1850” [Butler 523, 5:30pm.
- Extra lab time to work on woodblocks and engravings, 2018 Lab Schedule and Sign-up. Please sign up!

FOLLOW UP

Please add your notes of the field trip to the Met last Friday.

Note: Next week, we will discuss your proposed annotations, and you will have a chance to profit from Ad’s preliminary feedback, so please start thinking about annotation ideas. Sign up for a topic in the FA18 Possible Annotation Topics document. Begin thinking about the historical question your annotation will answer, begin compiling a materials list for experiments, and start developing a protocol for experimentation on your recipe(s). Begin to identify the recipes that your group will annotate in BnF Ms. Fr. 640. Instructions for annotations are found in the folder ANNOTATION INSTRUCTIONS (please read the documents in the folder in the numbered order).

****SPECIAL SYMPOSIUM -Two events**

- **Event 1: Special session for HIST GR8906**
 - October 18, 6-8pm
 - Fayerweather 513
 - Presentation by Susan Jones, Bart Fransen, Van Eyck in Open Access (VERONA) Project
 - **Bart Fransen**, Introduction to VERONA; Issues; Examining Objects (Thyssen Annunciation, Dresden triptych, Louvre diptych).

- **Susan Jones**, “Ca d'Oro *Crucifixion*: Materials, Techniques and Practices of Eyckian Painting”
- **Preparation:**
 - Explore the [VERONA website](#)
 - Be sure to browse through the “[Thematic Collections presentation](#)” section
 - Explore the [Closer to Van Eyck website](#)
 - Read the “[Further Works by Jan van Eyck](#)” section
- **Event 2: Workshop - “Making Art, Making Meaning in Fifteenth-Century Flanders” (link to workshop program)**
 - October 19, 9am-3:30pm, Fayerweather 513

Week 7 (October 22): Skillbuilding with Ad Stijnman II

EXPERT MAKER RESIDENCY:

Annotations: continue planning, assembling preliminary bibliography for your annotation

Field notes: due date for **all skill building field notes to be completed** is **October 25 at midnight (overnight, Thurs to Fri)**

IN PREPARATION

Required readings

- Ad Stijnman, “Experiment and trial: technical developments in 17th-century intaglio printmaking, an overview,” in *In Monte Artium, journal of the Royal Library of Belgium*, ed. Ann Diels, vol. 3 (2010), 115–126.
- Bevers - Rembrandt as an Etcher.pdf
 - Read Stijnman and Bevers and compile a list of questions that scholars ask of prints and printmaking from the explicit and implicit issues raised in this short essay
- Watch the section on etching of armor in Secrets of the Shining Knight
 - You might want to watch it all (it is a great example of reconstruction), but at least look at mercury gilding and blueing of the armor: 43:08m–50:00m

Recommended Readings

- Fucci - Rembrandt's Changing Impressions - The Changing Print.pdf

Contribute to the Discussion Questions document

IN CLASS

- | | |
|-------------|---|
| 10:10–11:00 | Discussion of Art Technological Source Research |
| | Discussion of experience with woodblock carving, engraving, and etching |
| 11:00–12:00 | Etching |
| 12:00–12:30 | Break |
| 12:30–2:00 | Etching |

FOLLOW UP

Annotations: continue planning, begin to firm your ideas for a reconstruction

Make a page in the Field Notes Folder entitled “Annotation Plans.” Eventually this page should include the following elements, but for class on Monday, please just do as much of the following list as possible (e.g., you will not be expected to have a safety protocol at this point)

- Names of your group members
- Describe your annotation plans
- List the recipes from MS Fr. 640 (and any other source) that you have identified so far (include full recipes if practical)
- Lay out a schematic plan for the historical, object-based, and hands-on research that will shed light on these recipes.
- List the materials you expect to need (are they in the lab inventory? See the Materials and Sourcing Reminders) where you will source them, and **safety** considerations.

**SPECIAL VISITS/AND OR SKILLBUILDING SESSIONS WITH AD

- Extra lab time to work on finishing woodblocks, engravings, etchings,
- Printing workshop at Teachers College (Tuesday, October 22)
- Individual student meetings with Ad Stijnman for advice on annotation topics: sign up for day/time on the dates/times to be scheduled

Week 8 (October 29): Collecting, Collections, Collectors

Annotations: continue planning, firming your ideas for a reconstruction

IN PREPARATION

Required reading

- Samuel Quiccheberg, *The First Treatise on Museums. Samuel Quiccheberg's Inscriptiones 1565*, trans. Mark A. Meadow and Bruce Robertson (Getty Research Institute, 2013). In conjunction with reading, do you think the objects that Fr. 640's recipes aim to produce would fit into Quiccheberg's amphitheater?
- 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.
- Smith and Chavez, “Imitating and Philosophizing in the Early Modern Workshop, Marjolijn Bol and Emma Spary, eds., *Material Mimesis*. forthcoming 2019 in Brill (Images, Captions).

Recommended reading

- Kathryn Kremnitzer and Siddhartha Shah, “Imitation Gemstones, Ruby, Emerald,” Annotation, Fall 2015.
- Alexandra Chessa, “Imitation Coral,” Annotation, Spring 2015.
- Neil Kenny, *The Palace of Secrets: Béroalde de Verville and Renaissance conceptions of knowledge* (Oxford: Clarendon, 1991), pp. 1-136, 156-57, 208-251.

- Neil Kenny, *The Uses of Curiosity in Early Modern France and Germany* (Oxford, 2004), ebook through Clio (Oxford Scholarship Online), Introduction: Ebook pdf version: pp. 1-30, Part 3: Ebook pdf version: pp. 1-33, 46-51, 62-79, 132-39.
- 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.
- Paula Findlen, "
- Anatomy Theaters, Botanical Gardens, and Natural History Collections," ch. 12 *The Cambridge History of Science*, eds. Katharine Park, Lorraine Daston, pp. 272-289. Browse other chapters in this immensely useful reference work.
- Lorraine Daston and Katharine Park, *Wonders and the Order of Nature* (Zone, 1998), chs. 1, 2, & 4. Ebook available on Clio.
- Horst Bredekamp, *The Lure of Antiquity and the Cult of the Machine* (1995), chs. "The Historical Chain" and "The Playfulness of Natural History," 11–36, 63–80.
- Giambattista della Porta (1538-1615), *Natural Magic*, the preface.
- Peter Parshall, "Imago Contrafacta: Images and Facts in the Northern Renaissance," *Art History* 16 (1993)

Contribute to the Discussion Questions document

IN CLASS

- 10:10–11:10 Printmaking follow-up discussion; discussion of the readings
- 11:10–12:15 Skype presentation on the Mayerne manuscript and Artechne database by Jenny Boulboulé, former M&K Postdoc and current Artechne Postdoc, Utrecht
- 12:15–12:45 Break
- 12:45–1:00 Intro to using Artstor and online image resources
- 1:00–1:30 Intro to Annotation Instructions and writing your annotations in Google Folders
- 1:45–2:00 Final distribution of annotation topics, and formation of groups.

FOLLOW UP

- **Consider** your annotation plans in light of our discussion of lab safety. Will you require a safety protocol? If so, begin to formulate one based on the Safety and Workflow template. Eventually, your document should describe your workflow in detail, including what safety measures you will need to take. Upload or create a working draft into the folder labelled FA18 - Safety Protocols.
- **Note:** The week after next, we will discuss your proposed annotations in class. Use the break to consolidate your ideas, research notes, and reconstruction plans into a coherent format in your Annotation Plans folder. You will give a brief presentation of your plans at the next class.

Annotations: Continue finalizing your annotation

In your "Annotation Plans," in the Field Notes Folder, make sure you have done as much as possible of the following:

- Names of your group members (if relevant)
- Describe your annotation plans

- List the recipes from MS Fr. 640 (and any other source) that you have identified so far (include full recipes if practical)
- Lay out a schematic plan for the historical, object-based, and hands-on research that will shed light on these recipes.
- List the materials you expect to need (are they in the lab inventory? See the Materials and Sourcing Reminders) where you will source them, and **safety** considerations.

Week 9 (November 5) — NO CLASS — Academic Holiday

Week 10 (November 12): Embodied Knowledge

Annotations: detailed plans due in class; safety protocols drafted

IN PREPARATION

Required reading

- Raymond Tallis, *The Hand: A Philosophical Inquiry into Human Being*, (Edinburgh: Edinburgh University Press, 2003), Ch. 1.
- 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.
- Charles M. Keller, “Thought and Production: Insights of the Practitioner,” *Anthropological Perspectives on Technology*, ed. by Michael Brian Schiffer (Albuquerque: University of New Mexico Press, 2001): 34-45.
- Emma Le Pouésard, “Bread as Mediating Material,” Annotation, Fall 2016.

Recommended reading

- Julian Thomas, “Phenomenology and Material Culture,” in *Handbook of Material Culture*, ed. Christopher Tilley et al. (Sage 2006), 43-59; ONLY READ 43-44, 47-48, 53-54, 56-57.
- Tim Ingold, *The Perception of the Environment: Essays in Livelihood, Dwelling and Skill*, (London and New York: Routledge, 2000), Ch. 18-19 (pp. 339-361).
- Erin O’Connor, “Embodied knowledge in glassblowing: the experience of meaning and the struggle towards proficiency,” *Sociological Review* (2007): 126-141.

Contribute to the Discussion Questions document

IN CLASS

10:10–11:10 Discussion of readings

11:10–12:30 Reports on annotation plans - see instructions above in Follow Up

Discussion of Workflow and Safety Protocol considerations

Intro to materials and safety considerations

- Workflow and Safety Protocol Template_NJR
- Materials Sourcing GD folder
 - Materials and sourcing - READ ME
- Lab inventory

- Safety Resources GD folder
 - Columbia Environmental Health and Safety
 - Chemwatch (Material Safety Data Sheet - MSDS - search) - must be connected to Columbia's network

12:30–13:00 Break

1:00–2:00 inventory your breadmolds, prints, plates

Week 11 (November 19): Craft, Science, and Art

Annotations: all safety protocols finalized; lab work & research

IN PREPARATION

Required reading

- Pamela O. Long, *Artisan Practitioners and the Rise of the New Sciences, 1400-1600* (Oregon State UP, 2011), Intro & ch. 2 (pp. 1 - 9, 30-61.)
- 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), 59-127.
- William Eamon and Françoise Paheau, "The Accademia Segreta of Girolamo Ruscelli: A Sixteenth-Century Italian Scientific Society," *Isis* 75, no.2 (1984): 327-42.

Recommended Reading

- Pamela O. Long, *Artisan Practitioners and the Rise of the New Sciences, 1400-1600* (Oregon State UP, 2011), remaining chapters.

Contribute to the Discussion Questions document

IN CLASS

10:10–10:30 Discussion of students' interaction with the beta Digital Critical Edition

10:30–11:15 Discussion of readings

11:15–2:00 Discuss drafts of Lab Workflow and Safety Protocols

FOLLOW UP

Finalize safety protocols by Saturday, November 24, 11:59 pm (overnight)

Week 12 (November 26): Annotations: lab work & research

Annotations: lab work & research

IN CLASS

10:10–1:00 Team sign-off on Lab Workflows and Safety Protocols

1:00 Terry Catapano speaks about Atom and xml search capabilities and Voyant Tools
Continue annotation work

FOLLOW UP

FIRST DRAFT OF ANNOTATIONS DUE SATURDAY December 1 BY MIDNIGHT

Optional event:

11/27 Alexis Hagadorn (Columbia University Libraries): "Writing on Parchment/Reading Parchment: Reconstructing Historical Practices from Text and Material" [Butler 523, 5:30pm].

Week 13 (December 3): Annotation Workshop I

Annotations: lab work & research

IN PREPARATION

All class members read all annotations to be prepared to discuss them in class and offer suggestions. **Contribute** questions, ideas, suggested sources for your colleagues' annotations.

IN CLASS

10:10–12:30 Discussion of annotation drafts
12:30–2:00 Move to lab for annotation work

FOLLOW UP

Work on annotations - lab and writing

Week 14 (December 10): Annotation Work

Annotations: lab work & research

IN CLASS

10:10–2:00 Continue annotation work

FOLLOW UP

SECOND DRAFT OF ANNOTATIONS DUE FRIDAY DEC 14 BY MIDNIGHT

Week 15 (December 17): Annotation Workshop II

Annotations: lab work & research

IN PREPARATION

Assess your field notes and safety protocols. Are there things that you need to add to flesh either out or reflect changes/decisions you made?

All class members read all annotations to be prepared to discuss them in class and offer suggestions. **Contribute** questions, ideas, suggested sources for your colleagues' annotations.

IN CLASS - MEET IN FAYERWEATHER 513

- 10:10–10:45 Announcements
 Style Sheet
 Explanation of image hyperlinking by NJR
 Mention need for an abstract
 Transferring ownership of files
10:45–1:00 Discussion of annotations
1:00–2:00 Move to lab for results inventorying

FINAL ANNOTATIONS DUE BY 5AM EST ON DECEMBER 23
FIELD NOTES JANUARY 7

May 14-16, 2019 — Working Group Meeting

Attendance required, if possible