University of Wisconsin–Madison
History of Science 903/911: **Early Modern Scientific Paperwork**
Spring 2022
1:20–3:15 pm W
984 Memorial Library

Florence Hsia
4123 Mosse Humanities Building
3:15 pm–5:15 pm W & by appt.
262-3971
florence.hsia@wisc.edu

Robin Rider
990 Memorial Library
11:30 am –12:30 pm M & by appt.
262-2809 (forwards to mobile)
robin.rider@wisc.edu

SUMMARY
Various forms of "paperwork" have drawn increasing scholarly attention as critical material factors in the making of scientific knowledge, whether at the level of the individual scholar taking notes, collating texts, describing specimens, or recording data; communities united by collective textual practices; or institutions, empires, and nation-states for which bureaucratized modes of paperwork constituted an important tool of knowledge production and control. Drawing on the rich resources of rare books and manuscripts held in UW–Madison's Special Collections, this seminar explores such everyday modes and practices of knowledge-making in the course of the sixteenth, seventeenth, and eighteenth centuries. Secondary source readings will represent a range of disciplinary perspectives. The writing requirement for this seminar will be tailored to students' particular needs in their respective programs of study.

By taking this course, students will gain familiarity with current scholarly trends in history of science, print culture, material culture, and archives; expand their analytical and interpretive skills; strengthen their oral and written communication skills; and gain experience working with a variety of print and manuscript materials held in Special Collections. This is a three-credit course. The credit standard for this course is met by an expectation of at least 135 hours of student engagement with the course learning activities (at least 45 hours per credit), which include regularly scheduled seminar meeting times, reading, writing, and other student work as described in the syllabus.

REQUIREMENTS
(a) Take turns leading discussion of assigned readings (the number of these will depend on the number of seminar participants). A 1-page critique/reaction should accompany your discussion.
(b) Take turns identifying and presenting a primary source exemplifying that week's readings; preferably the source will be one for which Special Collections holds a copy (logistical details to follow).
(c) Present a preliminary prospectus & bibliography to the seminar on **Apr 13**; please choose a primary or secondary source related to your research to share with the class in advance of your prospectus & bibliography presentation.
(d) Make a formal presentation on **Apr 20**, **Apr 27**, or **May 4** (details to follow).
(e) Complete 15–20 pages of prose writing in connection with this course, ideally a research paper which relates to the themes of this course, analyzes two or more primary sources, and makes use of some conceptual and/or methodological insight gained through the readings. Such a paper may involve comparison of early modern materials with materials from your own period of interest. Other possibilities include a critical discussion of some historiographical issue in the secondary literature; two or more book reviews (situating the book with respect to existing scholarship and critiquing the author's use of source material); or a bibliographic survey in preparation for a prelim field. Please meet with us as early as you can in the semester to discuss how you propose to fulfill the writing requirement.
(f) Grading will be based on class participation (~25%), in-class presentations (~25%), and your written work (~50%). All of your written work is due on **Wednesday, May 11** at 5:00 pm.

SCHEDULE
* A few readings are posted on the [Canvas course website](); most are available through the library catalog.

Jan 26   **Introductions**

Feb 2   **Approaches**
- Blair, Ann. "Reading strategies for coping with information overload ca. 1550-1700." *Journal of the history of ideas* 64, no. 1 (2003): 11–28.
- Van Meersbergen, Guido, and Frank Birkenholz. "Writing that travels: The Dutch East India Company's paper-based information management." In *Trading companies and travel knowledge in the early modern world*, edited by Aske Laursen Brock, Guido van Meersbergen, and Edmond Smith, 43–70. Milton: Taylor & Francis Group, 2021.
- Friedrich, Markus. "'Government in India and Japan is different from government in Europe': Asian Jesuits on infrastructure, administrative space, and the possibilities for a global management of power." *Journal of Jesuit studies* 4, no. 1 (2017): 1–27.
- Scott, James C. *Seeing like a state: how certain schemes to improve the human condition have failed*. New Haven: Yale University Press, 1998, introduction, chaps. 1–2 (1–83).
- Pomata, Gianna. "The recipe and the case: Epistemic genres and the dynamics of cognitive practices." In *Wissenschaftsgeschichte und Geschichte des Wissens im Dialog: Schauplätze der Forschung = Connecting science and knowledge: scenes of research*, edited by Kaspar von Greyerz, Silvia Flubacher, and Philipp Senn, 131–54. Göttingen: V&R Unipress, 2013.
- Daston, Lorraine. "The sciences of the archive." *Osiris* 27, no. 1 (2012): 156–87.
- Leong, Elaine. "Papering the household: Paper, recipes, and everyday technologies in early modern England." In *Working with paper: gendered practices in the history of knowledge*, edited by Carla Jean Bittel, Elaine Leong, and Christine von Oertzen, 32–45. Pittsburgh: University of Pittsburgh Press, 2019.
- Sherman, William H. "On the threshold: Architecture, paratext, and early print culture." In *Agent of change: print culture studies after Elizabeth L. Eisenstein*, edited by Sabrina A. Baron, Eric N. Lindquist, and Eleanor F. Shevlin, 67–81. Amherst; Washington, D.C.: University of Massachusetts Press; In association with the Center for the Book, Library of Congress, 2007.

Feb 9   **Writing**
- Stallybrass, Peter. "Everyday objects: Paper, letters, playing cards, printed forms, and blank books in Renaissance Europe." In *A cultural history of objects in the Renaissance*, edited by James Symonds, 103–24. London, UK; New York, NY: Bloomsbury Academic, Bloomsbury Publishing Plc, 2021.
- Yale, Elizabeth. "Marginalia, commonplaces, and correspondence: Scribal exchange in early modern science." *Studies in history and philosophy of science. Part C, Studies in history and philosophy of biological and biomedical* sciences 42, no. 2 (2011): 193–202.
- Stolberg, Michael. "John Locke's 'new method of making common-place-books': Tradition, innovation and epistemic effects." *Early science and medicine* 19, no. 5 (2014): 448–70.
- Ogborn, Miles. "Writing travels: Power, knowledge and ritual on the English East India Company's early voyages." *Transactions of the Institute of British Geographers* 27, no. 2 (2002): 155–71.
- Rose, Edwin. "Specimens, slips and systems: Daniel Solander and the classification of nature at the world's first public museum, 1753–1768." *British journal for the history of science 51*, no. 2 (2018): 205–37.
- *Signed, Sealed, & Undelivered* online exhibition, Room 5: [The Material Letter]()

Feb 16   **Archiving**
- Popper, Nicholas. "Archives and the boundaries of early modern science." *Isis* 107, no. 1 (2016): 86–94.
- Portuondo, María M. "Finding "science" in the archives of the Spanish monarchy." *Isis* 107, no. 1 (2016): 95–105.
- Yale, Elizabeth. "With slips and scraps: How early modern naturalists invented the archive." *Book history* 12 (2009): 1–36.
- Ogilvie, Brian. "Scientific archives in the age of digitization." *Isis* 107, no. 1 (2016): 77–85.
- Gadd, Ian. "The use and misuse of *Early English Books Online.*" *Literature compass* 6, no. 3 (2009): 680–92.
- Gregg, Stephen H. "Old books and digital publishing: Eighteenth-Century Collections Online." *Elements in publishing and book culture*, Cambridge: Cambridge University Press, 2021. Sections 1 ("Introduction), 2.1 ("Cataloguing the eighteenth century"), 3.2 ("Bookishness and the digital image"), 4 ("Beginnings"), and 5.1 ("Partnerships, licensing, and access, 2004–2020").
- History of Early English Books Online [background]

Feb 23   **Encrypting** – Professor Karen Britland
- Gibson, Jonathan. "Significant space in manuscript letters." *Seventeenth century* 12, no. 1 (1997): 1–10. (ISSN 2050-4616)
- Britland, Karen. "Reading between the lines: Royalist letters and encryption in the English civil wars." *Critical quarterly* 55, no. 4 (2013): 15–26.
- Marcus, Hannah, and Paula Findlen. "Deciphering Galileo: Communication and secrecy before and after the trial." *Renaissance quarterly* 72, no. 3 (2019): 953–95.
- Britland, Karen. "'What I write I do not see': Reading and writing with invisible ink." In *A material history of medieval and early modern ciphers: cryptography and the history of literacy*, edited by Katherine E. Ellison, and Susan M. Kim, 208–22. New York, NY: Routledge, 2018.
- *Signed, Sealed, & Undelivered* online exhibition, Room 6: Unlocking Sealed Letters
- Folger exhibition: *Decoding the Renaissance: 500 Years of Codes and Ciphers* (2014–2015)

Mar 2   **Accounting**
- Soll, Jacob. "Jean-Baptiste Colbert, accounting, and the genesis of the state archive in early modern France." In *Archives & information in the early modern world*, edited by Liesbeth Corens, Kate Peters, and Alexandra Walsham, 87–101. Oxford: British Academy, 2018.
- McCormick, Ted. "Governing model populations: queries, quantification, and William Petty's 'Scale of salubrity'." *History of science* 51, no. 2 (2013): 179–98.
- Ogborn, Miles. "Streynsham Master's office: Accounting for collectivity, order and authority in 17th-century India." *Cultural geographies* 13, no. 1 (2006): 127–55.
- Lowood, Henry E. "The calculating forester: quantification, cameral science, and the emergence of scientific forestry management in Germany." In *The quantifying spirit in the 18th century*, ed. by Tore Frängsmyr, J. L. Heilbron, and Robin E. Rider. Berkeley: University of California Press, 1990, 315–42.

Mar 9   **Printing**
- Baron, Sabrina Alcorn, Eric N. Lindquist, and Eleanor F. Shevlin. "Introduction." In *Agent of change* (2007), 1–12.
- Stallybrass, Peter. "'Little jobs': Broadsides and the printing revolution." In *Agent of change* (2007), 315–41.
- Smith, Margaret M. "Medieval roots of the Renaissance printed book: An essay in design history." In *Forms of the "medieval" in the "Renaissance": a multidisciplinary exploration of a cultural continu*um, edited by George Hugo Tucker, 143–53. Charlottesville, Va.: Rookwood Press, 2000.

- Stallybrass, Peter. "Books and scrolls: Navigating the Bible." In *Books and readers in early modern England: material studies*, edited by Jennifer Lotte Andersen, and Elizabeth Sauer, 42–79. Philadelphia: University of Pennsylvania Press, 2002.
- Blair, Ann. "Errata lists and the reader as corrector." In *Agent of change* (2007), 21–41.
- Knight, Jeffrey Todd. *Bound to read: Compilations, collections, and the making of Renaissance literature*. Philadelphia: University of Pennsylvania Press, 2013. Chapter 1, "Special Collections: Book curatorship and the idea of early print in libraries."

Mar 16   **Spring break** (no class meeting)

Mar 23   **Listing**
- Wisecup, Kelly. "Encounters, objects and commodity lists in early English travel narratives." *Studies in travel writing* 17, no. 3 (2013): 264–80.
- Hunter, Michael. "Robert Boyle and the early Royal Society: a reciprocal exchange in the making of Baconian science." *British journal for the history of science* 40, no. 1 (2007): 1–23.
- Avramov, Iordan. "Letters and questionnaires: The correspondence of Henry Oldenburg and the early Royal Society of London's Inquiries for Natural History." In *Empires of knowledge: scientific networks in the early modern world*, edited by Paula Findlen, 161–80. New York, NY: Routledge, 2019.
- Yale, Elizabeth. "Making lists: Social and material technologies in the making of seventeenth-century British natural history." In *Ways of making and knowing: the material culture of empirical knowledge*, edited by Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook, 280–301. Ann Arbor: University of Michigan Press, 2014.
- Fox, Adam. "Printed questionnaires, research networks, and the discovery of the British Isles, 1650–1800." *Historical journal* 53, no. 3 (2010): 593–621. (ISSN 1469-5103)

Mar 30   **Tabulating**
- Hunt, Katherine. "Convenient characters: numerical tables in William Godbid's printed books." *Journal of the northern Renaissance* (2014).
- Gregory, Stephan. "The tabulation of England: how the social world was brought in rows and columns." *Distinktion* 14, no. 3 (2013): 305–25.
- Marcacci, Flavia. "Seeing at a glance: The world-system debate and the role of the comparative tables in Giovanni Battista Riccioli's *Almagestum novum*." *Nuncius* 36, no. 1 (2021): 119–42.
- Daston, Lorraine. "Super-vision: weather watching and table reading in the early modern Royal Society and Académie royale des sciences." *Huntington Library quarterly* 78, no. 2 (2015): 187–215.
- Hess, Volker, and J. Andrew Mendelsohn. "Case and series: Medical knowledge and paper technology, 1600–1900." *History of science* 48, no. 3-4 (2010): 287–314.

Apr 6   Professor Lorraine Daston (readings TBA) – Curti Lectures April 7–8

Apr 13   **Prospectus & bibliography due**

Apr 20   **Presentations**

Apr 27   **Presentations**

May 4   **Presentations**

May 11   **Final written work due at 5:00 pm**