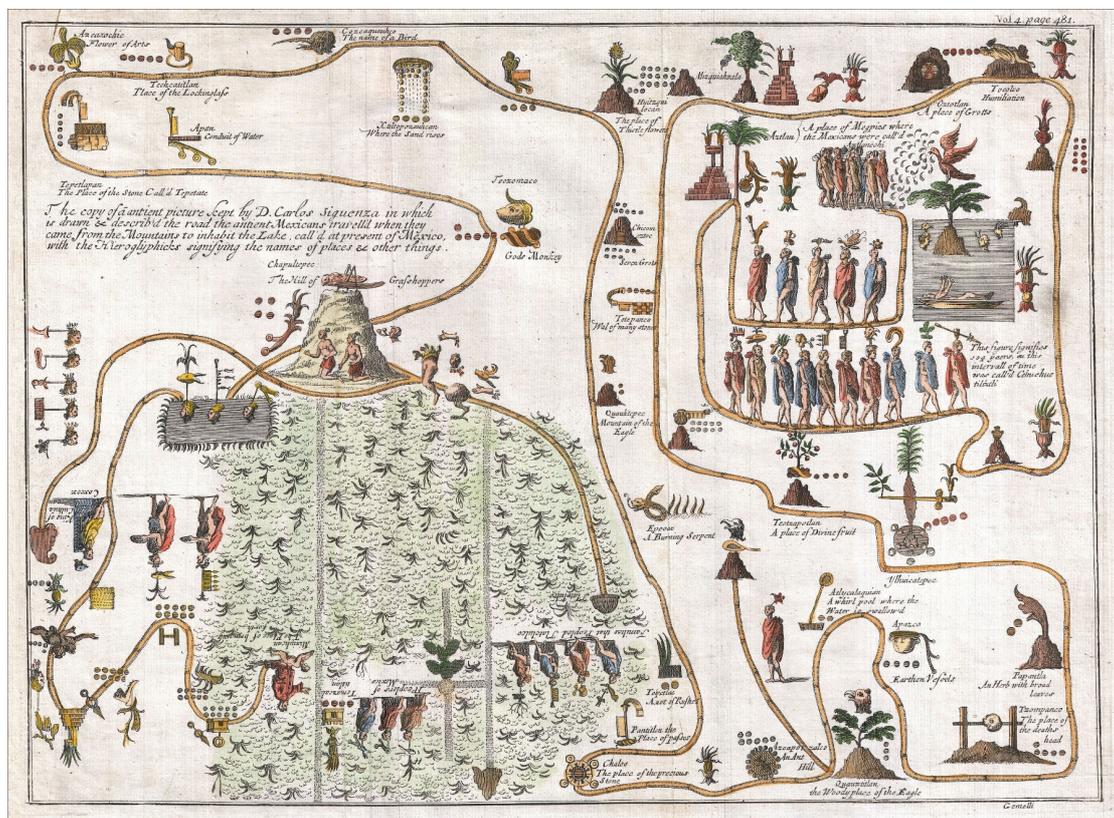


HST 240

Representations of Nature in the Early Modern World

Fall 2018
Schedule: MWF 13:00-13:50
Room: 8.310

Professor: Clare Griffin
clare.griffin@nu.edu.kz
Office: 8.402
Office hours:
Wednesday 11:00-12:00
Wednesday 15:00-16:00
Or by arrangement.



The Italian traveller Gemelli Careri's *Map of the Aztec Migration from Aztlan to Chapultapec* from 'Voyage Round the World', 1704.

Course Description

This course examines how the arts and the sciences collaborated to gain insight into nature in the early modern world. Naturalists and artists faced a natural world in expansion, one that they sought to describe in detail as new realms of natural history emerged, facilitated by a conjunction of sweeping geographic exploration and the invention of new scientific instruments. Exploration, trade, and colonial expansion

lead to encounters between different peoples that challenged perceptions of the limits and forms of human beings, nature, and the world.

Images, texts, and objects functioned in this context as powerful tools of knowledge and as repositories of newly gained information about human bodies, plants, animals, and minerals. Addressing the epistemological encounter between image makers, scientists, and the natural world, this course focuses on how such a moment of intersection called for innovative strategies of visualization, collection, and classification. It interrogates how techniques of up-close observation, connected to technological progress in printing texts and images, informed and circulated innovative modes of depiction.

This course takes a thematic approach, informed by a close examination of visual and textual sources. From the experimentation that nature generated in apothecary shops to the creation of cabinets of curiosity—challenging existing ideas about classification, visual expertise, collecting, and display—this course asks how questions of creation, morphology, scale, growth, and deformity, were investigated, and how we can retrace their scientific and artistic logic today.

Course Aims:

- 1) To provide students with a basic knowledge of early modern science, framed as engagements with the natural world, and in particular with how views of the natural world shifted in response to early modern explorations, colonizations, and development of scientific technologies.
- 2) To familiarize students with the major scholarly debates surrounding science in the early modern global world, and with the different ways historians of science, medicine, and also historians of trade, exploration, economics, and art have tried to explain early modern understandings of the natural world.
- 3) To enhance students' critical thinking and writing abilities, in particular with regards to interpreting a wide range of primary source materials as well as secondary literature, and the use of these in constructing an essay.
- 4) To develop students' research skills through the creation of a short presentation on a primary source and the relevance of that source to the main themes of the course.

Course Learning Outcomes (CLOs):

By the end of the course the student will be expected to:

- 1) Display an understanding of why the term 'science' is problematic when speaking of the early modern period, and of why looking more broadly at early modern engagements with and representations of nature helps us better understand what science is. [A1, A2, A3, B11]

2) Show a good understanding of the various ways historians from a range of sub-disciplines have approached the history of representations of nature in the early modern world. [B2, B8]

3) Demonstrate an ability to analyze primary and secondary source materials, and use them in the construction of an argumentative historical essay. [B3, B4, B5, B6, A4, A5, B10, B12]

4) Display an understanding of the huge range and diversity of primary sources of different genres and from different cultures that can be included in the history of early modern science. [B1, C1, C4, B7, C6]

Class Policies:

Attendance:

You are expected to attend every class and arrive on time. Excessive absences will lower your attendance grade, and limit your ability to succeed in the course. If you miss class for any reason, including medical emergencies, it will be counted as an absence. It is your responsibility to collect notes from other students for the class session(s) that you miss. If you are more than 5 minutes late to class, you will be counted as absent. See below on how attendance is factored into grades.

Participation:

Students are expected to participate in class, especially in seminars. Seminars will focus on the assigned reading, so it is expected that all students will arrive at class fully prepared to discuss the text. Failure to prepare for seminars, or to participate in the discussion, will result in a penalty. See below on how participation is factored into grades.

Readings:

Students are required to complete the essential readings for each lecture, and are encouraged to also take a look at the further readings (see below). All essential readings will be provided via Moodle.

Quizzes:

At irregular periods during the term, you will be asked to complete quizzes in class, or complete an online assignment out of class. These will be based on lectures, seminar discussions, or assigned readings already completed. You will be allowed your own notes (but not copies of readings) for these quizzes.

Presentations:

Each student will make a brief (5-10 minutes) presentation to the class on an object or picture of their choosing, and then be prepared to answer questions from the class relating to their presentation. The presented object should somehow relate to the theme of the course, and originate from the early modern world (approx. 1450-1750). The presentation should introduce the object, and explain how it helps us understand early modern ideas about nature.

Students MUST send in an image, or link to an image, no later than one week before their presentation.

Essays:

Students must write two essays. Here are some general points on essay writing for this class:

An essay should be an attempt to answer a question based on a range of relevant material organized into a coherent argument. The list of possible questions for each essay is given below. You must refer to primary and secondary sources using one referencing style consistently applied (i.e. do not change reference style mid-way through an essay). The essay should clearly indicate the assignment title, your name, email address and page numbers. Excluding references, your essays should be within the word count ranges given below. Essays MUST be your own work. Any essay that bears suspicious similarity to a published work, internet article, the essay of another student, or any other work, will be flagged by the TurnItIn system and may come in for serious penalties.

Readings for essays:

In writing an essay, you MUST follow the guidelines below about reading and citing material. Anyone not following these guidelines will receive a D.

- You MUST cite at least three of the weekly readings.
- You MUST cite at least one article from the list 'Further Readings'.
- You CAN cite my lectures (specify Lecture: Title of Lecture, Date).
- You CAN cite scholarly articles you have found through scholar.google.com or NU library
- You MUST NOT cite any non-scholarly articles: no newspaper articles, blogs (other than ones I have provided), websites etc. If in doubt, ask me before you use something.
- You MUST include footnotes in your essay that indicate where you found certain information or arguments.
- You MUST include a bibliography, a list of what you used for your essay.
- Citations and the bibliography MUST follow Chicago Style (Notes and Bibliography). See here: https://www.chicagomanualofstyle.org/tools_citationguide.html

Submission of Essays:

Essays must be submitted via Moodle by 8pm on the day of the deadline. Students will lose one full grade boundary for each part of day late up to a maximum of two days. For example, an essay submitted any time in the 24 hours immediately after the deadline that would receive an A grade for its quality would be marked down to a B; the same essay submitted between 24 and 48 hours after the deadline would be marked down to a C. Any essay submitted more than 48 hours after the deadline without prior permission for an extension will not be read, and the student will receive a 0 for that assignment.

Essay Topics:

Essay 1:

Word Count: 2,000-2,500 words

Question: "Should early modern maps be considered a kind of epistemic image?"

Essay 2:

Word Count: 2,500-3,500 words

Question: Answer ONE of the following questions:

EITHER

"Is Johann Amman's *Stirpium rariorum* (1739) an example of colonial botany?"

OR

"How and why were representations of the heavens important in the early modern world?"

Grading:

Grade Breakdown:

Attendance – 5%

Active Participation in Classes - 5%

Quizzes - 20% [4x 5%]

Class Presentation – 20%

Essay 1 – 20%

Essay 2 – 30%

These are the general grading criteria applicable to all assignments. **See also the file labelled 'NU Grade Scale' in Moodle.**

A	95%-100%	Excellent, exceeds the highest standards in the assignment or course
A-	90%-94.9%	Excellent; meets the highest standards for the assignment or course
B+	85%-89.9%	Very good; meets high standards for the assignment or course
B	80%-84.9%	Good; meets most of the standards for the assignment or course
B-	75%-79.9%	More than adequate; shows some reasonable command of the material
C+	70%-74.9%	Acceptable; meets basic standards for the assignment or course
C	65%-69.9%	Acceptable; meets some of the basic standards for the assignment or course
C-	60%-64.9%	Acceptable, while falling short of meeting basic standards in several ways
D+	55%-59.9%	Minimally acceptable
D	50%-54.9%	Minimally acceptable; lowest passing
F	0%-49.9%	Did not satisfy the basic requirements of the course

Attendance Grading

Attendance will be kept in Moodle. The percentage of attendance in that system will then be the numerical attendance grade, unless the recorded attendance is lower than 85%, in which case the attendance grade will be reduced to 0. Students are responsible for making sure that their attendance is recorded accurately in the system. They may ask for the attendance record to be corrected IF they can provide reasonable evidence of having attended a class for which they have been marked absent. They **MUST** make such a request **WITHIN TWO WEEKS** of the date of the class for which they have been marked absent; late requests will not be considered.

Participation Grading

During this course students will be asked to work in groups during class, to discuss readings, debate a question, or similar. The participation grade will be based on the student's performance in these class exercises. If a student participates fully in discussions, and makes an effort to comment to the class as a whole, they will receive an excellent grade. Students who do not speak to classmates, do not engage with the assignment, or use their phones or laptops for reasons other than consulting class materials, will have their grade reduced.

Presentations Grading

These are more detailed criteria applicable to grading class presentations.

A

Selection of an appropriate image or object.

As for A-, but with an excellent performance on all aspects.

A-

Selection of an appropriate image or object.

A full-length presentation that both gives an introduction to the image or object, and attempts to link that to the theme of the course.

Presentations that attempt to create an argument linking together the representation of nature in the image or object, and the item's production, value, or usage, would receive this grade.

B

Selection of an appropriate image or object.

A full-length presentation that both gives an introduction to the image or object, and attempts to link that to the theme of the course.

C

Selection of an appropriate image or object.

A reasonable, if slightly short (at least 4 minutes), presentation that both gives an introduction to the image or object, and makes some attempt to link that to the theme of the course.

Presentations including material not directly related to the theme of the course would typically receive this grade.

D

Excessively short – i.e. less than 4 minutes.

Selection of an inappropriate image or object.

A short, superficial presentation that only gives facts about the image or object.

F

Failure to complete assignment

Essays Grading

These are more detailed criteria applicable to grading the essays.

A

As for A-, but with an excellent performance on all aspects.

A-

Essay is of appropriate length.

Attempts to answer the question using a broad range of primary and secondary sources.

Essays receiving this grade would often go beyond the essential reading list to bring in more relevant sources.

Weights evidence for and against a specific viewpoint, and comes to an argued conclusion that strongly presents a view well-supported by the evidence.

B

Essay is of appropriate length.

Attempts to answer the question using a range of primary and secondary sources mostly taken from the essential reading list.

Weights evidence for and against a specific viewpoint, and attempts to present a conclusion based on the evidence.

C

Essay is of appropriate length.

Attempts to answer the question using a limited range of primary and/or secondary sources entirely taken from the essential reading list.

Attempts to weigh evidence for and against a specific viewpoint.

D

Essays receiving this grade would usually fall into one or more of the following categories:

Being under the minimum word count, or more than 10% over the maximum word count.

Entirely fails to answer the set question.

Cites inappropriate material.

Contains only basic information, with no attempt to construct an argument.

F

Failure to complete assignment, or submission of work that fails to meet the criteria for the course, or entirely fails to address the question.

Academic misconduct policy

Academic and personal misconduct by any student in this course will be dealt with according to the requirements and procedures in the Student Code of Conduct for Nazarbayev University. Plagiarism and cheating will not be tolerated. Students should be familiar with the university's official statement on plagiarism:

Plagiarism is intentionally or carelessly presenting the work of another as one's own. It includes submitting an assignment purporting to be the student's original work which has wholly or in part been created by another person. It also includes the presentation of the work, ideas, representations, or words of another person without customary and proper acknowledgement of sources. Plagiarism occurs when a person:

1. Directly copies one or more sentences of another person's written work without proper citation. If another writer's words are used, you must place quotation marks around the quoted material and include a footnote or other indication of the source of the quotation. This includes cut and paste from the internet or other electronic sources;
2. Changes words but copies the sentence structure of a source without giving credit to the original source, or closely paraphrases one or more paragraphs without acknowledgement of the source of the ideas, or uses graphs, figures, drawings, charts or other visual/audio materials without acknowledging the source or the permission of the author;
3. Submits false or altered information in any academic exercise. This may include making up data for an experiment, altering data, citing nonexistent articles, contriving sources, etc.;
4. Turns in all or part of assignment done by another student and claims it as their own;
5. Uses a paper writing service, has another student write a paper, or uses a foreign language translation and submits it as their own original work.

(Nazarbayev University Student Code of Conduct)

COURSE SCHEDULE¹

A Cultural History of the Early Modern World

Date	Topic	Readings	Assignment
Week 1			
13.08	Introductions		
15.08	Lecture: A Cultural History of the Early Modern World		

¹ I reserve the right to change the order of these classes, or the readings for each class, if necessary.

17.08	Seminar: The Early Modern Global	'Introduction', from Parker, Charles H. <i>Global interactions in the early modern age, 1400–1800</i> (Cambridge University Press, 2010).	
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Bodies and Medicines

Date	Topic	Readings	Assignment
Week 2	Medical Practices		
20.08	Lecture: Early Modern Medicine		
22.08	Seminar: Healing and Religion	Excerpt from Avvakum Petrov's <i>Life</i> .	
24.08	Seminar: Medical Institutions	Chapter 4, Shefer-Mossensohn, Miri. <i>Ottoman medicine: healing and medical institutions, 1500-1700</i> . SUNY Press, 2010.	
Week 3	Medicines		
27.08	Lecture: Medical Drugs		
29.08	Seminar: Drugs in Asia	Nappi, Carla. 'Bolatu's Pharmacy Theriac in Early Modern China.' <i>Early Science and Medicine</i> 14.6 (2009): 737-764.	
31.08	CONSTITUTION DAY HOLIDAY		

Visual Language

Date	Topic	Readings	Assignment
Week 4			
03.09	Seminar: Central Asian Medicines	Sections from Karoly, László. <i>A Turkic Medical Treatise from Islamic Central Asia: A Critical Edition of a Seventeenth-Century Chagatay Work by Subhān Qulī Khan</i> . Brill, 2014.	
05.09	Lecture: Epistemic Images	Daston, Lorraine. 'Epistemic images,' in A. Payne ed., <i>Vision And Its Instruments: Art, Science, And Technology In Early Modern Europe</i> (Penn State University Press, University Park, Pennsylvania, 2015), pp. 13-35.	
07.09	Seminar: Reading Images		Quiz 1

Maps

Date	Topic	Readings	Assignment
Week 5	Maps and Places		
10.09	Lecture: Mapping the Familiar		
12.09	Lecture: Mapping the Unknown		

Date	Topic	Readings	Assignment
14.09	Seminar: Mapping the Russian Empire	Kivelson, Valerie A. <i>Cartographies of Tsardom: the land and its meanings in seventeenth-century Russia</i> (Cornell University Press, 2006), Chapter 4.	
Week 6	Mapping Empires		
17.09	Seminar: Mapping Central Asia	Perdue, Peter C. "Boundaries, maps, and movement: Chinese, Russian, and Mongolian empires in early modern Central Eurasia." <i>The International History Review</i> 20, no. 2 (1998): 263-286.	
19.09	Seminar: Mapping the Americas	Schmidt, Benjamin, 'Mapping an Empire: Cartographic and Colonial Rivalry in Seventeenth-Century Dutch and English North America', <i>The William and Mary Quarterly</i> 54.3 (1997): 549-578.	
21.09	Seminar: Reading Maps		

The Heavens

	Topic	Readings	Assignment
Week 7	Europe Reads Astrology		
24.09	Lecture: Eurasian Astronomy and Astrology		
26.09	Seminar: Arabic Astrology	Saif, Liana. 'The Arabic theory of astral influences in early modern medicine', <i>Renaissance Studies</i> 25.5 (2011): 609-626.	Essay 1
28.09	Seminar: Chinese Astronomy	Hsia, Florence C. "Chinese astronomy for the early modern European reader." <i>Early Science and Medicine</i> 13, no. 5 (2008): 417-450.	
Week 8	The Americas		
01.10	Lecture: Mesoamerican Astrology		
03.10	Seminar: Mayan Space	Tedlock, Dennis, and Barbara Tedlock. "The Sun, Moon, and Venus Among the Stars: Methods for Mapping Mayan Sidereal Space." <i>Archaeoastronomy</i> 17 (2002).	
05.10	Seminar: Thinking Astrologically		QUIZ 2
FALL BREAK			

Alchemy

Week 9	Astrology and Alchemy		
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15.10	Seminar: Translating Astrology	George-Hirons, Amy. 'Yokol Cab: Mayan Translation of European Astrological Texts and Images in the Book of Chilam Balam of Kaua.' <i>Ethnohistory</i> 62.3 (2015): 525-552.	
17.10	Lecture: The Alchemical Traditions		
19.10	Seminar: What is Alchemy?	Newman, William R., and Lawrence M. Principe, 'Alchemy vs. chemistry: the etymological origins of a historiographic mistake', <i>Early science and medicine</i> 3.1 (1998): 32-65.	
Week 10	Alchemical Images		
22.10	Lecture: Alchemy in Images	Rampling, Jennifer M. 'Depicting the Medieval Alchemical Cosmos: George Ripley's Wheel of Inferior Astronomy', <i>Early Science and Medicine</i> , 18 (2013): 45-86.	
24.10	Seminar: Alchemy and Images	Moran, Bruce T. "Art and Artisanship in Early Modern Alchemy." <i>Getty Research Journal</i> 5 (2013): 1-14.	
26.10	Seminar: Reading Alchemical Images		

Colonial Botany

Date	Topic	Readings	Assignment
Week 11	Colonial Botany		
29.10	Lecture: Colonial Botany	Introduction, Schiebinger, Londa, and Claudia Swan, eds. <i>Colonial botany: science, commerce, and politics in the early modern world</i> . University of Pennsylvania Press, 2007.	Quiz 3
31.10	Seminar: Spanish America	Crawford, Matthew James. <i>The Andean Wonder Drug: Cinchona Bark and Imperial Science in the Spanish Atlantic, 1630-1800</i> . University of Pittsburgh Press, 2016, Chapter 1.	
02.11	Seminar: Sassafras		
Week 12	Colonial Botany 2		
05.11	Seminar: India and Europe	Chapter 1, Raj, Kapil. <i>Relocating modern science: circulation and the construction of knowledge in South Asia and Europe, 1650-1900</i> . Springer, 2007.	
07.11	Seminar: Russia's Botanical Empire	Koroloff, Rachel. "In Imperio Rutheno" Johann Amman's <i>Stirpium rariorum</i> (1739) and the Foundation of Russia's	

Date	Topic	Readings	Assignment
		Botanical Empire' in Batsaki, Yota, Sarah Burke Cahalan, and Anatole Tchikine. <i>The Botany of Empire in the Long Eighteenth Century</i> (Dumbarton Oaks Research Library and Collection Washington, D.C., 2017), pp. 235-56.	
09.11	Seminar: Reading Botany		

Monsters

Date	Topic	Readings	Assignment
Week 13	Defining Monsters		
12.10	Lecture: What is a Monster?	Davies, Surekha. <i>Renaissance Ethnography and the Invention of the Human: new worlds, maps and monsters</i> . Vol. 24. Cambridge University Press, 2016, Chapter 1.	
14.10	Seminar: Chinese Monsters	Nappi, Carla, <i>The monkey and the inkpot: natural history and its transformations in early modern China</i> . Harvard University Press, 2010, Chapter 6.	
16.10	Seminar: Peter the Great's Monsters		Essay 2
Week 14	Monsters		
19.10	Lecture: Monstrous or Exotic? Problematic Animals		
21.10	Seminar: Animal Monsters	Pluskowski, Aleksander. 'Narwhals or unicorns? Exotic Animals As Material Culture In Medieval Europe.' <i>European Journal of Archaeology</i> 7.3 (2004): 291-313.	
23.10	Final Discussion: What was the nature of nature in the early modern world?		Quiz 4

Online Resources:

Here is a list of online resources used in seminars, plus other resources relevant to this course. The online resources are good places to look for objects and images for your presentations.

Exhibition 'Drug Trade: Therapy, Pharmacy and Commerce in Early Modern Europe': <http://www.mhs.ox.ac.uk/drugtrade/index.htm>

The anatomical collection of Frederik Ruysch (1638–1731): <http://www.kunstkamera.ru/kunst-catalogue/index.seam?c=RUYSH>

Tour of a European anatomy theatre: <http://www.thegarret.org.uk/tour.htm>

The Oxford Museum of the History of Science's Astrolabe collection:
<http://www.mhs.ox.ac.uk/astrolabe/>

Imperiia project of historical Russian maps:
<http://worldmap.harvard.edu/maps/russianempire>

China's History in Maps project: <https://worldmap.harvard.edu/maps/china-history>

Early modern European maps of Africa:
http://libweb5.princeton.edu/visual_materials/maps/websites/africa/maps-continent/continent.html

Dürer, Albrecht, *Apocalypse*, 1498:
<http://webapp1.dlib.indiana.edu/metsnav3/general/index.html#mets=http%3A%2F%2Fpurl.dlib.indiana.edu%2Fiuclid%2Fgeneral%2Fmets%2FVAB8619&page=2>

Fuchs, Leonhart, *De Historia Stirpium*, Basel, 1542: http://www.e-rara.ch/bau_1/content/titleinfo/543675 (click on pdf link)

Archive of the trial records from the Salem Witch Trials, late seventeenth century: <http://salem.lib.virginia.edu/home.html>

Yale's Beinecke Library's exhibition on European alchemical texts:
<http://beinecke.library.yale.edu/collections/highlights/book-secrets-alchemy-and-european-imagination-1500-2000>

Ferrante Imperato's Dell' Historia Naturale (Naples 1599):
<http://www.mhs.ox.ac.uk/collections/imu-search-page/record-details/?thumbnails=on&irn=30140&TitInventoryNo=13839>
https://archive.org/details/gri_c00033125008260594

Wellcome Images, the digital archive of the Wellcome Trust, which primarily focuses on materials relating to the history of medicine:
<https://wellcomeimages.org/>

David Rumsey Map Collection, Stanford Library: www.davidrumsey.com

Van de Passe, Crispijn, *Hortus Floridus*, Utrecht, 1614 (1st ed.) Online edition:
http://objects.library.uu.nl/reader/index.php?obj=1874-255736&lan=en&_ga=1.258343756.734684421.1469954471#page//98/11/79/98117971234025888095670821311480455829.jpg/mode/1up

Plumier, Charles, *Traité des Fougères de l'Amerique*, Imprimerie Royale, Paris, 1693: <http://gallica.bnf.fr/ark:/12148/btv1b86232830/f1.image.r=>

Merian, Maria Sybilla, *Metamorphosis Insectarum surinamensis*, Amsterdam, 1705: <http://sammlungen.ub.uni-frankfurt.de/varia/content/titleinfo/4604281>

Belon, Pierre, *Histoire de la nature des estranges poissons marins*, Paris, 1551:
http://www.museum.nantes.fr/pages/06-actumuseum/expo-illustrations/belon_v1/index.html

Gessner, Conrad, *Thierbuch*, 1583, online edition: <http://bildsuche.digitale-sammlungen.de/index.html?c=viewer&bandnummer=bsb00086947&pimage=00001&v=100&nav=&l=de>

Hooke, Robert, *Micrographia: or, Some physiological descriptions of minute bodies made by magnifying glasses*, J. Martyn and J. Allestry, London, 1665:
<http://digicoll.library.wisc.edu/cgi-bin/HistSciTech/HistSciTech-idx?type=header;pview=hide;id=HistSciTech.HookeMicro>

Further Reading:

This is the place to start to look for more materials for your essays. The books listed below are all available in the NU library; the articles are either available through NU library's electronic databases of journals, or on Moodle. This is not an exhaustive list – if you find other academic books or articles, you are welcome to use them.

Akilli, Sinan, 'Apocalyptic eschatology, astrology, prophecy, and the image of the Turks in Seventeenth Century England', *Edebiyat Fakültesi Dergisi* 29.1 (2012).

Ben-Zaken, Avner, 'The heavens of the sky and the heavens of the heart: the Ottoman cultural context for the introduction of post-Copernican astronomy', *The British Journal for the History of Science* 37.01 (2004): 1-28.

Bleichmar, Daniela, *Visible Empire, Botanical Expeditions and Visual Culture in the Hispanic Enlightenment* (University of Chicago Press, 2012).

Branch, Jordan, 'Mapping the sovereign state: Technology, authority, and systemic change', *International Organization* 65.01 (2011): 1-36.

Braude, Benjamin, 'The sons of Noah and the construction of ethnic and geographical identities in the medieval and early modern periods', *The William and Mary Quarterly* 54.1 (1997): 103-142.

Bräunlein, Peter J., 'The frightening borderlands of Enlightenment: The vampire problem', *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 43.3 (2012): 710-719.

Breen, Benjamin, 'Portugal, Early Modern Globalization and the Origins of the Global Drug Trade', *Perspectives on Europe* (2012), 84-88.

Brock, Michelle D., 'Internalizing the Demonic: Satan and the Self in Early Modern Scottish Piety', *Journal of British Studies* 54.01 (2015): 23-43.

Carolino, Luís Miguel, and Carlos Ziller Camenietzki, 'Tokens of the future: comets, astrology and politics in early modern Portugal', *Cronos* 9 (2006): 33-58.

Chajes, Jeffrey Howard, 'Judgments sweetened: possession and exorcism in early modern Jewish culture', *Journal of Early Modern History* 1.2 (1997): 124-169.

Chakrabarti, Pratik. "Neither of meate nor drinke, but what the Doctor alloweth': Medicine amidst War and Commerce in Eighteenth-Century Madras.' *Bulletin of the History of Medicine* 80.1 (2006): 1-38.

Collis, Robert, 'The Petersburg Crucible: Alchemy and the Russian Nobility in Catherine the Great's Russia', *Journal of Religion in Europe* 5.1 (2012): 56-99.

Cook, Harold J., and Timothy D. Walker. 'Circulation of Medicine in the Early Modern Atlantic World', *Social History of Medicine* (2013), 337-51.

Dackerman, Susan, *Prints and the pursuit of knowledge in early modern Europe*. Harvard Art Museums/Yale University Press.; New Haven/Cambridge, 2011.

Darr, Orna Alyagon, 'Experiments in the Courtroom: Social Dynamics and Spectacles of Proof in Early Modern English Witch Trials', *Law & Social Inquiry* 39.1 (2014): 152-175.

Daston, Lorraine, 'Marvelous facts and miraculous evidence in early modern Europe', *Critical Inquiry* 18.1 (1991): 93-124.

Daston, Lorraine, 'Curiosity in early modern science.' In: *Word and Image*. 11:4 (1995): 391-404.

Dimić, Milan V., 'Vampiromania in the eighteenth century: The other side of enlightenment', *Man and Nature/L'homme et la nature* 3 (1984): 1-22.

Erdem, Yusuf Hakan, 'Magic, Theft and Arson: the Life and Death of an Enslaved African Woman in Ottoman İzmit', in *Race and Slavery in the Middle East: Histories of Trans-Saharan Africans in Nineteenth-century Egypt, Sudan, and the Ottoman Mediterranean* ed.s Terence Walz, Kenneth M. Cuno (Oxford University Press: 2010): 125-46.

Findlen, Paula, 'The Museum: Its Classical Etymology and Renaissance Genealogy.' *The Journal of the History of Collections* 1, no. 1, 1989, 59-78.

Håkansson, Håkan, 'Tycho the Prophet: History, Astrology and the Apocalypse in Early Modern Science', *The Word and the World* (Palgrave Macmillan UK, 2007): 137-156.

Harrison, Mark, 'From medical astrology to medical astronomy: sol-lunar and planetary theories of disease in British medicine, c. 1700–1850', *The British Journal for the History of Science* 33.01 (2000): 25-48.

Hostetler, Laura, 'Contending cartographic claims? The Qing Empire in Manchu, Chinese, and European maps', in *The Imperial Map*, ed. James Akerman (Chicago, University of Chicago Press, 2008).

Jakobsson, Ármann, 'The Fearless Vampire Killers: A Note about the Icelandic Draugr and Demonic Contamination in Grettis Saga', *Folklore* 120.3 (2009): 307-316.

Jenner, Mark SR, and Patrick Wallis, 'The medical marketplace' in *Medicine and the Market in England and its Colonies, c. 1450–c. 1850* (Palgrave Macmillan UK, 2007): 1-23.

Keyworth, G. David, 'Was the Vampire of the Eighteenth Century a Unique Type of Undead-corpse? Research article', *Folklore* 117.3 (2006): 241-260.

Kieckhefer, Richard, *Forbidden Rites: A Necromancer's Manual of the Fifteenth Century* (Penn State Press, 1998).

Kieckhefer, Richard, 'The specific rationality of medieval magic', *The American Historical Review* 99.3 (1994): 813-836.

Kivelson, Valerie A., and Jonathan Shaheen, 'Prosaic Witchcraft and Semiotic Totalitarianism: Muscovite Magic Reconsidered', *Slavic Review*, 70 (2011), 23-44.

Kivelson, Valerie A., 'Between All Parts of the Universe': Russian Cosmographies and Imperial Strategies in Early Modern Siberia and Ukraine', *Imago Mundi* 60.2 (2008): 166-181.

Klaassen, Frank, *The Transformations of Magic: Illicit Learned Magic in the Later Middle Ages and Renaissance* (Penn State Press, 2013).

Klaniczay, Gábor, 'The Decline of Witches and the Rise of Vampires', *The Witchcraft Reader*, ed. Darren Oldridge (2002): 387-98.

Klestinec, Cynthia, 'A history of anatomical theatres in 16th century Padua,' *Journal of the History of Medicine* (2004) 375-412.

Kusukawa, Sachiko, *Picturing the Book of Nature: image, text, and argument in sixteenth-century human anatomy and medical botany*, (University of Chicago Press, Chicago, 2012).

Levin, Eve, 'From Corpse to Cult in Early Modern Russia,' in *Orthodox Russia: Belief and Practice under the Tsars*, ed. Valerie A. Kivelson, Robert H. Greene (University Park, pa: Pennsylvania State Univ. Press, 2003), pp. 81-104.

Levin, Eve, 'Healers and Witches in Early Modern Russia', in *Saluting Aron Gurevich: Essays in History, Literature, and Other Related Subjects*, ed. Yelena Mazour-Matusevich and Alexandra S. Korros (Leiden: Brill, 2010), 105–33.

Maerker, Anna. 'Florentine anatomical models and the challenge of medical authority in late-eighteenth-century Vienna.' *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 43.3 (2012): 730-740.

Mancosu, Paolo, 'Acoustics and Optics in the early modern period,' in L. Daston and K. Park eds., *The Cambridge History of Science, vol . 3: Early Modern Science*, Cambridge University Press, 596-631.

Mayor, A. Hyatt, *Prints and People: A Social History of Printed Pictures*, The Metropolitan Museum of Art, New York 1971.
http://www.metmuseum.org/art/metpublications/Prints_and_People_A_Social_History_of_Printed_Pictures

McMillan, Timothy J., 'Black magic: Witchcraft, race, and resistance in colonial New England', *Journal of Black Studies* 25.1 (1994): 99-117.

Newman, William R., and Lawrence M. Principe, 'Alchemy vs. chemistry: the etymological origins of a historiographic mistake', *Early science and medicine* 3.1 (1998): 32-65.

Nummedal, Tara E. 'Alchemical Reproduction and the Career of Anna Maria Zieglerin.' *Ambix* 48.2 (2001): 56-68.

Pächt, Otto, 'Early Italian Nature Studies and the Early Calendar Landscape,' *Journal of the Warburg and Courtauld Institutes*, Vol. 13, No. 1/2, 1950, pp. 13-47.

Padrón, Ricardo, 'A Sea of Denial: The Early Modern Spanish Invention of the Pacific Rim', *Hispanic Review* 77.1 (2009): 1-27.

Parker, Charles H. *Global interactions in the early modern age, 1400–1800* (Cambridge University Press, 2010).

Parshall, Peter, 'Imago Confracta: Images and Facts in the Northern Renaissance,' *Art History*, Vol. 16, 1993, pp. 554-579.

Parshall, Peter, 'Art and the Theater of Knowledge: The Origins of Print Collecting in Northern Europe,' *Harvard University Art Museums Bulletin* 2, 1994, pp. 7-36.

Popper, Nicholas, 'Abraham, planter of mathematics': Histories of mathematics and astrology in early modern Europe' *Journal of the History of Ideas* 67.1 (2006): 87-106.

Rampling, Jennifer M. 'Depicting the Medieval Alchemical Cosmos: George Ripley's Wheel of Inferior Astronomy', *Early Science and Medicine*, 18 (2013): 45–86.

Rix, Martyn, *The Golden Age of Botanical Art*, The University of Chicago Press, Chicago, 2013.

Schmidt, Benjamin, 'On the Impulse of Mapping, or How a Flat Earth Theory of Dutch Maps Distorts the Thickness and Pictorial Proclivities of Early Modern Dutch Cartography (and Misses Its Picturing Impulse)', *Art History* 35.5 (2012): 1036-1049.

Schmidt, Benjamin, 'Mapping an Empire: Cartographic and Colonial Rivalry in Seventeenth-Century Dutch and English North America', *The William and Mary Quarterly* 54.3 (1997): 549-578.

Siraisi, N.G., *Medieval and Early Renaissance Medicine. An Introduction of Knowledge and Practice* (Chicago: University of Chicago Press, 1990).

Smith, Pamela H., 'Alchemy as a Language of Mediation at the Habsburg Court', *Isis* 85.1 (1994): 1-25.

Sneddon, Andrew, 'Medicine, belief, witchcraft and demonic possession in late seventeenth-century Ulster', *Medical humanities* 42.2 (2016): 81-86.

Von Stuckrad, Kocku, 'Interreligious Transfers in the Middle Ages: The Case of Astrology', *Journal of Religion in Europe* 1.1 (2008): 34-59.

Sugg, Richard, "'Good Physic but Bad Food': Early Modern Attitudes to Medicinal Cannibalism and its Suppliers', *Social history of medicine* 19.2 (2006): 225-240.

Swan, Claudia, 'Ad vivum, naer het leven, from the life: defining a mode of representation,' *Word & Image*, vol. 11/4, 1995, pp. 353-372.

Turnbull, David, 'Cartography and science in early modern Europe: Mapping the construction of knowledge spaces', *Imago Mundi* 48.1 (1996): 5-24.

Veres, Madalina-Valeria, 'Putting Transylvania on the map: cartography and enlightened absolutism in the Habsburg Monarchy', *Austrian History Yearbook* 43 (2012): 141-164.

Waite, Gary K., 'Talking animals, preserved corpses and Venusberg: The sixteenth-century magical world view and popular conceptions of the spiritualist David Joris (c. 1501–56)', *Social History* 20.2 (1995): 137-156.

Wallis, Patrick, 'Exotic Drugs and English Medicine: England's Drug Trade, c.1550- c.1800', *Social History of Medicine* (2012), 20-46.

Winterbottom, Anna E. 'Of the China Root: A Case Study of the Early Modern Circulation of Materia Medica.' *Social History of Medicine* (2014).

Wittkower, Rudolf. 'Marvels of the East: A Study in the History of Monsters.' *Journal of the Warburg and Courtauld Institutes* 5 (1942), pp. 159-97.

Xianqing, Z., 'The metaphor of illness: Medical culture in the dissemination of Catholicism in early Qing China', *Frontiers of History in China* 4.4 (2009): 579-603.

Yee, Cordell D. K., 'Reinterpreting traditional Chinese geographical maps', in *The History of Cartography, vol. 2, bk. 2, Cartography in the Traditional East and Southeast Asian Societies*, ed. J. B. Harley and David Woodward (Chicago, University of Chicago Press, 1994), 37–70.

Yonemoto, Marcia, 'The 'Spatial Vernacular' in Tokugawa Maps', *The Journal of Asian Studies* 59.03 (2000): 647-666.