HPSC0089 Curating Science & Technology

Course Syllabus

2022-23 session |
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Course Information

This module is designed around a simple question: how is the museum a different environment for historical and interpretative work related to science and technology, as compared with a university? It opens up access to the Science Museum's galleries, collections and curators, revealing the ways that the history of science and technology are preserved, researched, and displayed in a national museum.

This course involves a consideration of the history of museums, curatorial work and general museological questions about how to use objects in historical work. It discusses how different topics and kinds of objects feature in the museum's work, from acquisition through to being placed on display. Curators and other researchers will present and discuss a variety of case studies, helping students to acquire a rich sense of what it means to curate science, and especially the history of science, in a public museum. Dissertations may also be written on museum topics.

Basic course information

Moodle Web site:	TBC
Assessment: [1]	One joint (groups of c.4 students) presentation (week 5) on the themes of the course (20%) One written piece of 3,000 words combining elements of object biography and catalogue (perhaps of an imaginary exhibition) that demonstrates how museum objects and/or collections can be used to provide insights into the history of STEM (80%)
Timetable:	http://www.ucl.ac.uk/sts/module-information/pg-modules
Prerequisites:	None
Required texts:	P. J. T. Morris (ed) (2013), *Science for the Nation: Perspectives on the History of the Science Museum* (Basingstoke: Palgrave Macmillan, 2013). Especially: Chapters 1, 5, 7, 10.
Course conveners:	Emily Rees Koerner, Research Manager (Postgraduate and Skills), Science Museum Glyn Morgan, Exhibitions Curator, Science Museum
Teaching assistant:	Rachel Hill, PhD candidiate in the history of space, UCL
Contact:	emily.rees@sciencemuseum.ac.uk in the first instance
Office location:	Science Museum Dana Research Centre, 165 Queen's Gate London SW7 5HD By appointment only

[1] For further information regarding assessments (including word counts, late submissions and possible penalties) please refer to the STS appropriate programme page i.e B.Sc or M.Sc

Schedule

UCL Week	Topic / location	Date	Tutors
1	Museum	11 Jan	Glyn Morgan, Emily Rees, Rachel Boon, Rachel Hill
2	Object	18 Jan	Miriam Dafydd, Will Sims, Abi Wilson
3	Context	25 Jan	Sophie Waring
4	Audience	1 Feb	Audience Research Team, Stefania Zardini, Emily Rees
5	Presentations by students	8 Feb	**N/A**
6	**Reading Week**	15 Feb	
7	Researching Material Culture	22 Feb	Sophie Waring, Alex Rose, Rebecca Mellor, Ben Russell, Emily Rees
8	Collecting and Displaying	1 Mar	Doug Millard, Rachel Hill
9	Making science exhibitions	8 Mar	Glyn Morgan, Imogen Clarke
10	Ethics and inclusion	15 Mar	Rebecca Mellor & Laura Büllesbach, Nathan Bossoh & Lily Hayward
11	Critique week/Writing workshop	22 Mar	Glyn Morgan & Emily Rees, Alex Rose, Tim Boon

Assessments

Summary

	Description	Deadline	Word limit	Deadline for Tutors to provide Feedback
Joint presentation	One joint (groups of 4-5 students) presentation (week 5) on the themes of the course (20%)	Wednesday 8 February	10 mins	Wednesday 1 March
Long Essay	One written piece that demonstrates how museum objects and/or collections can be used to provide insights into the history of STEM (80%)	Monday 3 April	3,000 words	Friday 5 May

Assignments
To be submitted as PDF or Word file to Moodle. Word length excludes appendices.

Specific Criteria for Assessment for this Module:
Students are expected to combine STS / HPS insights and theory with a specific focus on material culture / museum objects. Both the presentation and the essay should convey engagement with the course

readings.

Aims & objectives

Aims:

- To give insights into how museum staff understand and mobilise the material culture of science, technology and medicine in theory and in practice.

- To link by subject and in theoretical approaches with the broader STS and HPS courses at UCL.

Objectives:

- To examine a range of material objects from across science, technology and medicine.

- To explore how authors from various traditions have written about the material culture of science etc.

- To provide insights into how science museums collect, document, research, and display across science, technology and medicine.

- To provide the opportunity and the structure for students to discuss, present and write about these topics.

- To seek connections with the STS and HPS literature.

Reading list
General Introduction: P. Morris (ed) (2010), *Science for the Nation: Perspectives on the History of the Science Museum* (Basingstoke: Palgrave Macmillan). See also papers in the Science Museum Group E-Journal: http://journal.sciencemuseum.org.uk/

Topic	Date	Session overview / readings
1. Museum	11 Jan	**Overview:** This session starts exploring how and why museums curate science and technology. We introduce students to the Science Museum, its diverse collections and some of the stories that we're helping to tell about them. **Essential reading:** • Alison Boyle, '"Not for Their Beauty": Instruments and Narratives at the Science Museum, London'. *Scientific Instruments on Display*, ed. Silke Ackermann (Brill, 2014), 37-60 • Robert Bud, 'Infected by the Bacillus of Science: The Explosion of South Kensington'. *Science for the Nation: Perspectives on the History of the Science Museum*, ed. Peter Morris (Palgrave Macmillan, 2010), 11-40 **Background reading:** • Tony Bennett, *The Birth of the Museum: History, Theory, Politics* (Routledge, 1995), 89-105 (Chapter 3) • John V. Pickstone, 'Museological Science? The Place of the Analytical/Comparative in Nineteenth-Century Science, Technology and Medicine'. *History of Science*, 32:2 (June 1994), 111-138. • Nick Thomas, 'The Museum as Method', *Museum Anthropology*, 33:1 (2010), 6-10.
2. Object	18 Jan	**Overview:** Why do museums keep so much stuff? We use objects for memorialisation and inspiration in our displays, but can they tell us anything new? This week we will explore what makes an object suitable for the Science Museum collection and will introduce the role of Museum stores and their function. From collections development work to hazards to collections engagement, the session will explore the journey and endless potential of the SMG collection. **Essential reading:** • John Liffen 'Behind the Scenes: Housing the Collections', in P. J. T. Morris (ed) (2013), *Science for the Nation: Perspectives on the History of the Science Museum* (Basingstoke: Palgrave Macmillan, 2013). **Background reading:** • Michael Thompson, *Rubbish Theory: The Creation and Destruction of Value - New Edition* (Pluto Press, 2017), Chapters One and Two. • Marta C. Lourenço and Samuel Gessner, 'Documenting Collections: Cornerstones for More History of Science in Museums', *Science & Education* 23:4 (1 April 2014): 727–45.
3. Context	25 Jan	**Overview:** This session explores how curators are collecting the social histories of STEM objects and considers the wider shift in approach away from sequentialism and towards capturing personal perspectives and narratives. We will reflect on the opportunities and challenges involved in collecting personal interpretations. **Essential reading:**

		• Alison Boyle, 'Festschrift: of mice and myths: challenges and opportunities of capturing contemporary science in museums', Science Museum Group Journal (2020) **Background reading:** • Samuel J.M.M. Alberti, Elsa Cox, Tacye Phillipson & Alison Taubman, 'Collecting contemporary science, technology and medicine', *Museum Management and Curatorship*, 33:5 (2018), 402-427. DOI: 10.1080/09647775.2018.1496353 • Owain Rhys (2014), *Contemporary Collecting: Theory and Practice* (Edinburgh & Boston), 20-49, and 50-80 • Laura Spinney, 'What are COVID archivists keeping for tomorrow's historians?' *Nature* 588, 578-580 (2020): https://www.nature.com/articles/d41586-020-03554-0
4. Audience	1 Feb	**Overview:** Museums are social spaces, full of objects and exhibitions for people to visit, look at, and sometimes to touch. However, museum buildings cannot contain the full scale and breadth of the collections they are built from. Increasingly, museums are turning their attention to engaging wider audiences with what is not on physical display, and the objects that exist outside of their public spaces. In this class we will think about the digital lives of collections, and discuss how digital resources can expand audience engagement with collections. **Essential reading:** • Science Museum Digital Strategy https://www.sciencemuseumgroup.org.uk/about-us/policies-and-reports/digital-strategy-2018-21/ • Claire Bailey-Ross, 'Online User Research Literature Review: UK Gallery, Library, Archive and Museum (GLAM) Digital Collection', *Zenodo* (2021), https://doi.org/10.5281/zenodo.5779826 • Russo, A. (2012) 'The rise of the Media Museum. Creating interactive cultural experiences through social media' in Giaccardi, E. (eds.) (2012) *Heritage and Social Media. Understanding Heritage in a Participatory Culture*. Oxon, Routledge. **Background reading:** • Suzanne Keene, Ch 9 'Collections and Digitisation', in *Fragments of the World: Uses of Museum Collections* by Suzanne Keene (Butterworth-Heinemann, 2005). Ross Parry, ed., *Museums in a Digital Age* (London: Routledge, 2010). • Giannini, T., Bowen, J. P. (2019) 'Museums and Digitalism' in T. Giannini and J. P. Bowen (eds.), *Museums and Digital Culture*, Springer Series on Cultural Computing. • Dziekan V., Proctor N. (2019) 'From elsewhere to everywhere. Evolving the distributed museum into the pervasive museum'. in Drotner K., Dziekan V., Parry R. and Schrøder K., (eds.), *The Routledge Handbook of Museums, Media and Communication*, Routledge.
5. Student presentations	8 Feb	This week is dedicated to students' assessed group presentations. These will be in person in the Dana Studio at the usual time of 13.00-15.00.
6. Reading Week	15 Feb	
7. Researching Material Culture	22 Feb	**Overview:** This week, different curators from the Science Museum will introduce and discuss how they have chosen to develop a creative piece of historical and/or museological scholarship using the museum's holdings. How can we use material objects to inform our understanding of the history of STEM, rather than simply as illustrations? **Essential reading:**

		• K. Anderson et al, 'Reading instruments: objects, texts and museums', *Science and Education* 22, 2013, pp.1167-1189. • 'Introduction' (chapter) from Leonie Hannan and Sarah Longair, *History through material culture*, Manchester: Manchester University Press, 2017, pp.1-14 **Background reading:** • Leonie Hannan and Sarah Longair, 'Developing a Methodology', in History through Material Culture. IHR Research Guides (Manchester: Manchester University Press, 2017), 70-94 • David Pantalony, "Biography of an Artifact: The Theratron Junior and Canada's Atomic Age," Scientia Canadensis: Canadian Journal of the History of Science, Technology and Medicine, 34:1 (2011): 51, doi:10.7202/1006928ar.
8. Collecting and Displaying	1 Mar	**Overview:** This session considers and critiques existing museum collecting and display strategies by focusing on how space exploration has been represented. What is an 'authentic' object in this context? How can we collect and display ephemera? And how can we tell stories of individual people as well as that of much bigger cultural and technological developments? We will look at narratives that presuppose technical interest on the part of audiences and explore how broader, more culturally inclusive narratives may more meaningfully engage and inform visitors. **Essential Reading:** • Alice Gorman, 'The cultural landscape of interplanetary space'. *Journal of Social Archaeology*, Vol 5(1): 85–107 (2005), doi: 10.1177/1469605305050148 • Asif Siddiqi, 'Shaping the World: Soviet-African Technologies from the Sahel to the Cosmos' *Comparative Studies of South Asia, Africa and the Middle East*, Vol. 41, No. 1, (2021) • doi 10.1215/1089201X-8916932 **Background Reading:** • Kerrie Dougherty 'Retrieving Woomera's heritage: recovering lost examples of the material culture of Australian space activities' *Showcasing Space,* edited by Martin Collins and Doug Millard (Science Museum, 2005) • Doug Millard, 'Cosmonauts: Birth of an Exhibition'. *Science Museum Group Journal*, 5:5 (2016), doi:10.15180/160508. Peter Redfield, 'The Half-Life of Empire in Outer Space' *Social Studies of Science*, Vol. 32, No. 5/6 (2002)
9. Making science exhibitions	8 Mar	**Overview:** The session will explore the curation of temporary exhibitions. Focusing on our current major exhibition Science Fiction: Voyage to the Edge of Imagination, curators will explore the wide range of practical and methodological challenges involved in curating science exhibitions. How can we effectively represent fictional material culture in a contemporary factual museum setting – and what does this teach us about how we might curate other kinds of material? **Essential reading:** TBC **Background reading:** • Amy Butt, (2021) "The Present as Past: Science Fiction and the Museum", Open Library of Humanities 7(1). doi: https://doi.org/10.16995/olh.634 • Lindsay Persohn, (2021) "Curation as methodology", *Qualitative Research*, 21(1), 20–41. https://doi.org/10.1177/1468794120922144

10. Ethics and Inclusion	15 Mar	**Overview:** In recent years the museum and heritage sector has increasingly sought to grapple with the legacies of empire. How should museum workers confront their institutions' colonial and imperial pasts? How should objects associated with these pasts be displayed and interpreted for everyone? And can museums truly be places that are open for all? **Essential:** • Tilly Blyth, (2020). 'Rethinking collections research', Science Museum Group blog: https://www.sciencemuseumgroup.org.uk/blog/rethinking-collections-research/ • Dan Hicks, (2020). *The Brutish Museum*, Pluto Press. Chapter 1, "The Gun that Shoots Twice". • Subhadra Das., Miranda Lowe, (2018). "Nature Read in Black and white: decolonial approaches to interpreting natural history collections", Journal of Natural Science Collections, Vol 6, pages 4 – 14 **Background:** • Zaheer Baber, (2016). "The Plants of Empire: Botanic Gardens, Colonial power and Botanical Knowledge", Journal of Contemporary Asia, Vol 46, pages 659 - 769 • Robin McKie, (2022). 'Wellcome Collection in London shuts 'racist, sexist and ableist medical history gallery', Guardian article: https://www.theguardian.com/culture/2022/nov/27/wellcome-collection-in-london-shuts-racist-sexist-and-ableist-medical-history-gallery • Lucile H. Brockway, (2009). "Science and Colonial Expansion: The role of the British Royal botanic Gardens", American Ethnologist, Vol 6, pages 449 - 465
11. Critique week/Writing workshop	22 Mar	**Overview:** This session, we'll wrap up with a brief history of museums – how did they get to where they are today? We'll discuss how museums have been affected by controversies, from protests around nuclear power to questions over patronage. How can museum workers ethically collect and curate resistance? The session will finish with a writing workshop to support you as you develop your written pieces. **Essential reading:** • Cameron, F. 2007. 'Moral lessons and reforming agendas: history museums, science museums, contentious topics and contemporary societies.' In S. J. Knell et al. eds. *Museum revolutions: how museums change and are changed*. Abingdon: Routledge, pp.330-342. • Students should also have a browse of the website: https://www.museumsarenotneutral.com/ • Geraldine Kendall Adams, 'To tackle the climate emergency, museums must learn to let go', *Museums Journal* Sept/Oct 2022, online here: https://www.museumsassociation.org/museums-journal/analysis/2022/09/to-tackle-the-climate-emergency-museums-must-learn-to-let-go/ **Background reading:** • Sophie Forgan, 'Building the Museum: Knowledge, Conflict, and the Power of Place', Isis, 96 (2005), 572-85

		Tony Bennett, The Birth of the Museum: History, Theory, Politics (Routledge, 1995), 89-105

Course expectations
Students on this course will be expected to attend and participate in all classes (at the Science Museum); to take part in a joint assessed presentation; to read at least the essential reading, and in their area of special interest leading to their assessment, to undertake the background reading too.

Additional information
The course is taught at the Science Museum, all starting at the Dana Research Centre, 165 Queens Gate, London SW7 5HD. https://goo.gl/maps/serrBNWN6K72

Important policy information

Details of college and departmental policies relating to modules and assessments can be found in the STS Student Handbook https://www.ucl.ac.uk/sts/study/sts-student-handbook/sts-student-handbook

All students taking modules in the STS department are expected to read these policies.