

HPSC0089 Curating Science & Technology

Course Syllabus

2020-21 session | Dr Tim Boon | tim.boon@sciencemuseum.ac.uk

Course Information

Introduction

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. The module involves a consideration of the history of museums, curatorial work and general museological questions about how to use objects in historical work. The course discusses how different topics and kinds of objects feature in the museum's work, from acquisition through to being placed on display. From the variety of case studies that the curators present, students will 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:	https://moodle.ucl.ac.uk/course/view.php?id=38691
Assessment: ¹	One joint (groups of c.3 students) presentation (week 4) on the themes of the course (20%) One written piece of 4,000 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), <i>Science for the Nation: Perspectives on the History of the Science Museum</i> (Basingstoke: Palgrave Macmillan). Paperback: 2013. Especially: Chapters 1, 5, 7, 10.
Course convener:	Dr Tim Boon, Head of Research & Public History, Science Museum
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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	Introduction to Museum History	13 Jan	Tim Boon and Alison Hess
2	Object Stories	20 Jan	Ali Boyle
3	Audience and Digital Collections	27 Jan	Jessica Bradford and John Stack
4	Caring for Collections	3 Feb	Laura Humphreys and Alison Hess
5	Presentations by Students	10 Feb	
6	Reading Week	17 Feb	
7	Collections: Art at the Science Museum	24 Feb	Katy Barrett
8	Galleries: Displaying Space	3 Mar	Doug Millard
9	Science collections, displays and decolonisation	10 Mar	Alex Rose and Ben Russell
10	Galleries: Medicine Galleries	18 Mar	Imogen Clarke, Katie Dabin, and Selina Hurley
11	Museums and Media	25 Mar	Tim Boon

Assessments

Summary

	Description	Deadline	Word limit	Deadline for Tutors to provide Feedback
Joint presentation	One joint (groups of c.3 students) presentation (week 4) on the themes of the course (20%)	10 February	10 mins	10 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%)	13 April	4,000 words	13 May
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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 consider 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	Readings
1. Introduction to Museum History	13 Jan	<p>Session overview:</p> <p>This session introduces students to the birth of the modern museum and the history of the Science Museum. We consider the development of museums from the early modern cabinet of curiosities to the 19th and 21st century museum and learn about the origins and history of the Science Museum.</p> <p>Essential reading:</p> <p>Film: <i>The Building and Operation of Industrial Museums</i> (1928) (online)</p> <ul style="list-style-type: none">• Daston, Lorraine and Katherine Park, 'Wonders of Art, Wonders of Nature', in <i>Wonders and the Order of Nature: 1150–1750</i> (New York: Zone Books, 2001), pp.255-301• Cornish, Caroline. 'Botany Behind Glass: The Vegetable Kingdom on Display at Kew's Museum of Economic Botany'. <i>Science Museums in Transition: Anglo-American Cultures of Display in the Nineteenth Century</i>, edited by Carin Berkowitz and Bernard Lightman, University of Pittsburgh Press, 2017, pp. 188–213.• Bud, Robert. 'Infected by the Bacillus of Science: The Explosion of South Kensington'. <i>Science for the Nation: Perspectives on the History of the Science Museum</i>, edited by Peter Morris, Palgrave Macmillan, 2010, pp. 11–40• Boyle, Alison. "'Not for Their Beauty": Instruments and Narratives at the Science Museum, London'. <i>Scientific Instruments on Display</i>, edited by Silke Ackermann, Brill, 2014, pp. 37–60.• Forgan, Sophie, 'Building the Museum: Knowledge, Conflict, and the Power of Place', <i>Isis</i>, 96 (2005), 572–85 <p>Background reading:</p> <ul style="list-style-type: none">• Arnold, Ken, <i>Cabinets for the Curious: Looking Back at Early English Museums</i> (Aldershot: Ashgate, 2005) – Introduction and Chapter 2, pp.1-41• Bennett, Tony. <i>The Birth of the Museum: History, Theory, Politics</i>, Routledge, 1995, Chapter 3, pp.89-105• Boon, Timothy. 'Parallax Error? A Participant's Account of the Science Museum, c.1980-c.2000'. <i>Science for the Nation: Perspectives on the History of the Science Museum</i>, edited by Peter Morris, Palgrave MacMillan, 2010, pp. 111–36• Pickstone, John V. 'Museological Science? The Place of the Analytical/Comparative in Nineteenth-Century Science, Technology and Medicine'. <i>History of Science</i>, vol. 32, no. 2, June 1994. ProQuest, http://search.proquest.com.libproxy.ucl.ac.uk/docview/1298070264/citation?accountid=14511
2. Object Stories	20 Jan	<p>Session overview:</p> <p>Why do museums keep so much stuff? We use objects for memorialisation and inspiration in our displays, but can they tell us anything new? In this class we will explore different ways of studying material culture, and introduce the Science Museum's object records.</p> <p>Essential reading:</p> <ul style="list-style-type: none">• Alberti, Samuel J. M. M., 'Objects and the Museum', <i>Isis</i>, 96 (2005), 559–71• DeVorkin, David H. 'Space Artifacts: Are They Historical Evidence?', in <i>Critical Issues in the History of Spaceflight</i>, ed. Steven J. Dick and Roger D. Launius (Washington, D.C.: National Aeronautics and Space Administration, Office of External Relations, 2006), 578.

		<ul style="list-style-type: none"> • Prown, Jules David, "Material/Culture: Can the Farmer and the Cowman Still Be Friends?," in <i>Learning from Things: Method and Theory of Material Culture Studies</i>, ed. W. D. Kingery (Washington, D.C: Smithsonian Institution Press, 1996), 22 <p>Background reading:</p> <ul style="list-style-type: none"> • Hannan, Leonie, and Sarah Longair. <i>History through Material Culture</i>. IHR Research Guides. Manchester: Manchester University Press, 2017. • Pantalony, David, "Biography of an Artifact: The Theratron Junior and Canada's Atomic Age," <i>Scientia Canadensis: Canadian Journal of the History of Science, Technology and Medicine</i> 34, no. 1 (2011): 51, doi:10.7202/1006928ar. • Thompson, Michael. <i>Rubbish Theory: The Creation and Destruction of Value - New Edition</i>. Pluto Press, 2017. Chapters One and Two. • Lourenço, Marta C. and Samuel Gessner, 'Documenting Collections: Cornerstones for More History of Science in Museums', <i>Science & Education</i> 23, no. 4 (1 April 2014): 727–45.
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<p>3. Audiences and Collections Online</p>	<p>27 Jan</p>	<p>Session Overview</p> <p>'I long shared the view that it was pointless simply putting collections catalogues on the web: objects had to be selected and framed in a narrative or virtual exhibition. Now, I believe we have moved beyond this. Museums should list their collections online and see what happens.' Suzanne Keene, <i>Fragments of the World</i></p> <p>Museums as places that people visit, objects in exhibitions that people see. However, as we have already discussed, museum collections are much larger than what is on display and increasingly museums are turning their attention to alternative ways in which audiences can access them. In this class we will think about the digital lives of collections, by discussing the ways in which information is stored, searched and shared. We will discuss ways in which digital resources can expand audience engagement with collections through the example of the Science Museum Group new Collections Online platform: https://collection.sciencemuseumgroup.org.uk/</p> <p>Reading List</p> <p>Essential</p> <ul style="list-style-type: none"> • Parry, Ross. <i>Museums in a Digital Age</i> / / Edited by Ross Parry. London: Routledge, 2010. Print. Leicester Readers in Museum Studies. Read the introduction, but many of the chapters are useful to this class. • Ch 9 'Collections and Digitisation', Keene, Suzanne. <i>Fragments of the World : Uses of Museum Collections</i> / by Suzanne Keene. 1st ed. 2005. Web. • Science Museum Digital Strategy https://www.sciencemuseumgroup.org.uk/about-us/policies-and-reports/digital-strategy-2018-21/ <p>Background</p> <ul style="list-style-type: none"> • https://www.sciencemuseum.org.uk/objects-and-stories/everyday-wonders/home-cook-kenwood-chef • https://www.sciencemuseum.org.uk/objects-and-stories/chemistry/x-ray-crystallography-revealing-our-molecular-world • https://www.sciencemuseum.org.uk/objects-and-stories/medicine/thalidomide • https://www.scienceandmediamuseum.org.uk/objects-and-stories/first-digital-photos
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4. Collections in Storage	3 Feb	<p>Session Overview</p> <p>In this class we go behind the scenes of the museum and examine the practicalities of caring for, and in this case, moving the reserve collections of a national museum. We will explore the ways in which storage is managed and shaped around the requirements of the collections. Finally we will seek to explore questions of access and what it means that the majority of museum collections are not on display.</p> <p>Essential Reading</p> <ul style="list-style-type: none"> • Introduction, Hess, Alison, Rhianedd Smith, and Anna Woodham. Exploring Emotion, Care, and Enthusiasm in “Unloved” Museum Collections / Alison Hess, Rhianedd Smith, Anna Woodham. 2020. Collection Development, Cultural Heritage, and Digital Humanities. Web • Introduction, Brusius, Mirjam, and Singh, Kavita. Museum Storage and Meaning. 1st ed. Vol. 1. Milton: Routledge, 2018. Routledge Research in Museum Studies. Web. • Leskard, Marta. "Sustainable storage." Science Museum Group Journal 4.04 (2015). http://journal.sciencemuseum.ac.uk/browse/issue-04/sustainable-storage/ • Liffen, John, 'Behind the Scenes: Housing the Collections' in P. Morris (ed) (2010), <i>Science for the Nation: Perspectives on the History of the Science Museum</i> (Basingstoke: Palgrave Macmillan). • Film: 'Moving 300, 000 objects' https://youtu.be/46cxFYpDiNw
5. Student Presentations	10 Feb	
6. Reading Week	17Feb	
7. Collections: Art and the Science Museum	24 Feb	<p>Session overview:</p> <p>This session introduces students to the Science Museum’s art collections as well as the history of art/science collaborations in modern and contemporary art. We consider the presentation and curation of artworks in the context of a Science Museum and discuss what art can add to conversations about science in the contemporary museum.</p> <p>Reading List</p> <ul style="list-style-type: none"> • Jardine, Boris, ‘Made Real: Artifice and Accuracy in Nineteenth-Century Scientific Illustration’, Science Museum Group Journal (2) Autumn 2014 http://journal.sciencemuseum.ac.uk/browse/issue-02/made-real/ • Redler, Hannah, ‘Context, Collaboration and Contemporary Culture’ in Camilla Rossi-Linnemann and Giulia de Martini (eds.), <i>Art in Science Museums: Towards a Post-Disciplinary Approach</i> (Routledge, 2020), pp.77-89 • Robbins, Claire, ‘Introduction’, in <i>Curious Lessons in the Museum: The Pedagogic Potential of Artists' Interventions</i> (London & New York: Routledge, 2013), pp. 1-14 <p>Background reading:</p> <ul style="list-style-type: none"> • Ian Blatchford and Tilly Blyth, eds., <i>The Art of Innovation: From Enlightenment to Dark Matter</i> (Bantam Press, 2019) • Camilla Rossi-Linnemann and Giulia de Martini (eds.), <i>Art in Science Museums: Towards a Post-Disciplinary Approach</i> (Routledge, 2020)

8. Galleries: Displaying Space	3 Mar	<p>Session overview:</p> <p>This session considers and critiques existing modes of space exploration museum displays. It suggests a widespread norm which presupposes technical interest on the part of audiences. Further, it indicates broader, culturally inclusive narratives offer more meaningful and attractive themes to entice the sceptical museum visitor.</p> <p>Essential reading:</p> <ul style="list-style-type: none"> • Durrans, Brian, 'Space Is the Place'. <i>Showcasing Space</i>, edited by Martin Collins and Doug Millard, Science Museum, 2005, pp. 169- 79 • Geppert, Alexander C. T., (Ed.), <i>Imagining Outer Space: European Astroculture in the Twentieth Century</i>, Palgrave Macmillan, 2012 • Gouyon, Jean-Baptiste (2014) "'Something Simple and Striking, If Not Amusing" – the Freedom 7 Special Exhibition at the Science Museum, 1965'. <i>Science Museum Group Journal</i>, vol. 1, no. 01, 2014. doi:10.15180/140105 • McCurdy, Howard E., <i>Space and the American Imagination</i>, Johns Hopkins University Press; second edition. • Millard, Doug 'Cosmonauts: Birth of an Exhibition'. <i>Science Museum Group Journal</i>, vol. 5, no. 05, 2016, doi:10.15180/160508.
9. Science collections, displays and decolonisation	10 Mar	<p>Session Overview</p> <p>Decolonisation has become a key concern of the museum and heritage sector in recent years. How should institutions confront their colonial and imperial pasts? How should these subjects be displayed and interpreted for visitors? This session explores these issues in relation to science and technology collections and displays, using two galleries at the Science Museum as case studies: James Watt and Our World, and Science City 1550–1800.</p> <p>Reading List</p> <p>Essential</p> <ul style="list-style-type: none"> • Alberti, Samuel J. "Shaping Scientific Instrument Collections." <i>Journal of the History of Collections</i> 31.3 (2019): 445-52. • Ian Blatchford (2020), 'It's not the job of museums to censor history', <i>The Telegraph</i>, https://www.telegraph.co.uk/art/what-to-see/not-job-museums-censor-history/ • Tilly Blyth (2020), 'Rethinking collections research', <i>Science Museum Group blog</i> https://www.sciencemuseumgroup.org.uk/blog/rethinking-collections-research/ • Tristram Hunt (2020), 'How museums can help end the culture wars', <i>Prospect Magazine</i> https://www.prospectmagazine.co.uk/magazine/how-museums-can-help-end-the-culture-wars • Stephen Mullen (2020), 'The rise of James Watt: enlightenment, commerce, and industry in a British-Atlantic merchant city, 1736-74'. In Dick, M. and Archer-Parré, C. (eds.), <i>James Watt (1736-1819): Culture, Innovation and Enlightenment</i>. Liverpool University Press: Liverpool, pp. 39-61. • Thembi Mutch (2019), 'Making the case for decolonisation', <i>Museums Journal</i> <p>Background:</p> <ul style="list-style-type: none"> • Alexandra Rose and Jane Desborough (2019), <i>Science City 1550–1800: craft, commerce and curiosity</i>, Scala

<p>10. Museums, media and the senses</p>	<p>17</p>	<p>Session overview: In this class, we zoom out from the closer focus of earlier classes to think about the themes of the course, first by thinking about how museum displays relate to other media, then thinking about how, specifically, the museum experience draws on the senses in particular ways, by referring to hearing and touch in addition to vision, which conventionally dominates how we think about museum displays.</p> <p>Essential reading:</p> <ul style="list-style-type: none"> • Griffiths, Alison. <i>Shivers Down Your Spine: Cinema, Museums, and the Immersive View</i>. Columbia University Press, 2008. Selection to be specified. • Gouyon, Jean-Baptiste. 'Making Science at Home: Visual Displays of Space Science and Nuclear Physics at the Science Museum and on Television in Postwar Britain'. <i>History and Technology</i>, vol. 30, no. 1–2, Routledge, Apr. 2014, pp. 37–60. Taylor and Francis, https://doi.org/10.1080/07341512.2014.902233. • Boon, Timothy M, 'Music for Spaces: Music for Space: An Argument for Sound as a Component of Museum Experience', <i>Journal of Sonic Studies</i> (2014), https://www.researchcatalogue.net/view/108934/108935 • Rich, Dr Jennifer. 'Acoustics on Display'. <i>Science Museum Group Journal</i>, vol. 7, no. 07, 2017. journal.sciencemuseum.ac.uk, http://dx.doi.org/10.15180/170706. <p>Background reading</p> <ul style="list-style-type: none"> • Maerker, Anna. 'Towards a Comparative History of Touch and Spaces of Display: The Body as Epistemic Object'. <i>Historical Social Research</i>, vol. 40, no. 1, Zentrum fur Historische Sozialforschung e.V, 2015, pp. 284–300. https://pure.mpg.de/rest/items/item_2558312_7/component/file_3003033/content • Boon, Tim; Jamieson, Annie; Kannenberg, John; Kolkowski, Aleks and Mansell, James. 'Organising Sound': how a research network might help structure an exhibition', <i>Science Museum Journal</i>, Autumn 2017, Issue 08: http://dx.doi.org/10.15180/170814
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<p>11. Galleries: Medicine</p>	<p>24 Mar</p>	<p>Session overview: This session takes place in the new medicine galleries. Students will reflect on the challenges relating to displaying health and medicine and includes discussions on the presentation of objects relating to mental health and disability in the gallery.</p> <p>Essential reading:</p> <ul style="list-style-type: none"> • Selina Hurley & Natasha McEnroe, eds., <i>The Medicine Cabinet: The Story of Health & Disease Told Through Extraordinary Objects</i> (London: Science Museum, 2019), pp. 235, 243, 247, 144 & 152. • Oisin Wall, 'Hearing Distant Voices', in Natasha McEnroe, ed, <i>Medicine: An Imperfect Science</i> (London: Scala, 2019), pp. 146-155 • Larsen, Frances, <i>An Infinity of Things: How Sir Henry Wellcome Collected the World</i> (Oxford: Oxford University Press, 2009), pp. 1-26 • Julie Anderson and Lisa O'Sullivan, 'Histories of Disability and Medicine: Reconciling Historical Narratives and Contemporary Values', in Richard Sandell, Jocelyn Dodd, Rosemarie Garland-Thomson, eds., <i>Re-Presenting Disability, Activism and Agency in the Museum</i> (Abingdon: Routledge, 2010), pp. 143-154 <p>Background reading:</p> <ul style="list-style-type: none"> • Bud, Robert, 'Medicine at the Science Museum', in <i>Past, Present and Future</i> ed. by Samuel JMM Alberti and Elizabeth Hallam (London: The Royal College of Surgeons England, 2013), pp. 60-73 • Hallam, Elizabeth and Samuel JMM Albert, 'Bodies in Museums', in <i>Medical Museums: Past, Present and Future</i> ed. By Samuel JMM Alberti and Elizabeth Hallam (London: The Royal College of Surgeons England, 2013), pp.1-15
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Course expectations

Students on this course will be expected to attend and participate in all classes via Zoom; 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, undertake the background reading too.

Additional information

Due to the impact of the Covid-19 pandemic the course will be taught entirely online. However, we do hope to offer students the opportunity to undertake voluntary visits to the Science Museum.

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.