HPSC0036 Engaging the Public with Science

Course Syllabus

2022-23 session | Profesor Jon Agar and Dr Charlote Sleigh

This module focuses on the many different ways in which publics engage with science in face-to-face contexts. Teaching will particularly focus on how scientists engage members of the public through direct interactions such as science festivals and museums, and on how specific public groups, such as patient and citizen groups get involved, and engage with, scientific and medical research. Alongside gaining a practical understanding of how to organize such activities, students will also critically reflect on the theory and context that underpins such activities such as models of publics and audiences, rationales for engagement in different contexts and the wider policy contexts and historical trends.

Basic course information

Moodle Web site:	https://moodle.ucl.ac.uk/course/view.php?id=28053		
Assessment:	Two pieces of coursework:		
	50% - Essay (2,500 words)		
	50% - Group Project Report and Video		
Timetable:	www.ucl.ac.uk/timetable		
Prerequisites:	No prerequisites		
Required texts:	See reading list below and Moodle.		
Course tutor(s):	Course convenor: Professor Jon Agar and Dr Charlotte Sleigh		
Contact:	Jonathan.agar@ucl.ac.uk c.sleigh@ucl.ac.uk		
Web:	http://www.ucl.ac.uk/sts/staff/agar_http://www.ucl.ac.uk/sts/staff/sleigh		
Office location:	22 Gordon Square, Room 2.4a (Agar) and 2.1 (Sleigh)		
Office hours	Tuesdays 11-12, Thursays 11-12 (Agar)		
	TBC (Sleigh)		

Schedule

UCL Week	Lecture / Seminar	Lecture Date	Lecture Topic	Activity			
6	1	11 th Jan	Introduction to module, context to public engagement,	Key concepts, terms and identities			
7	2	18 th Jan	Discussion of key readings	Student-led discussion on readings assigned in week 1			
8	3	25 th Jan	Public engagement with policy in the UK				
9	4	1 st Feb	Scientists doing engagement: citizens, patients and local communities				
10	5	8 th Feb	Informal engagement with science: Museums, culture and inclusion	Museum exhibition visit and discussion			
Deadline for Essay 5pm, 21 st February							
11			Reading Week				
12	6	22 nd Feb	From the theoretical to the practical	5 1			
13	7	1 st Mar	Engagement practice: who?	Group project development work			
14	8	8 th Mar	Engagement practice: Group project development What? work				
15	9	15 th Mar	Engagement practice:Group project developmentHow?work				
16	10	10 21 st Mar Group pitch unassessed mock presentations (10-15 mins per group)					
Deadline for Group Video Pitch and Group Report 5pm, 24 th March							

Assessments

	Description		Word limit
50%	Individual Essay	17:00 21/02/23	2,500 Words
50%	Group Project 1) Group Video Pitch (25%) 2) Group Report (25%)	1) 5pm, 24/03/23 2) 5pm, 24/03/23	 1) 15 mins per group 2) Total word count of 2000 words

Coursework

Assessment 1: Essay (50%)

Write a scholarly essay, of no more than 2,500 words, critically discussing the movement from the Public Understanding of Science (PUS) to Public Engagement of Science and Technology (PEST) with reference to a specific case study / subject of your choice.

The aim of the essay is to both question and contextualise the evolution and relevance of public engagement, and the various forms in which it takes place, whilst considering the varying effectiveness of approaches to more deliberative democracy and policy development.

Assessment 2: Group engagement piece (50%)

Students will, as a group, choose a scenario from those provided in class, and work together to develop a public engagement activity which they will then be assessed on in two ways:

- Video project pitch in the last session of the module, each group will have 15 minutes to pitch and receive feedback their proposed activity to the 'funding panel'. Students will be assessed on a submitted video version, largely on the content, but also on the presentation itself. Each member of the group must contribute to a part of the presentation. This is worth 25% of the final module mark. Further details on this assignment will be provided in class.
- 2. Group report each group will also provide a written rationale for their chosen activity, which will incorporate academic perspectives, justifying their approach. This is worth 25% of the final module mark. Further details will be provided in class.

Specific Criteria for Assessment for this Module:

These will be provided in class.

General criteria for assessment

The departmental marking guidelines can be found in the STS Student Handbook. Criteria for specific pieces of assessment will be available via the Moodle page and discussed in class.

Aims & Objectives

Aims

This course aims to engage students with the theory and practice of engaging the public with science via faceto-face activities in multiple public contexts.

Learning Outcomes

On successful completion of this course students should be able to:

- 1. Demonstrate a practical understanding of face-to-face engagement with science activities in a range of public contexts
- 2. Offer analysis of the theoretical underpinnings of practical activity in this area.
- 3. Understand the historical and policy context within which public engagement has developed
- 4. Evaluate the effectiveness of public engagement processes in particular social contexts
- 5. Reflect on the purpose, relevance and effectiveness of public engagement via face-to-face activities.

In addition, by the end of the course, students should be able to:

- 1. Demonstrate research skills appropriate to Year 2 STS modules
- 2. Demonstrate time and project management, working to tight deadlines
- 3. Demonstrate independence and initiative in project work

Reading List

Core readings include:

Bennett, D.J. and Jennings, R.C. eds., 2011. *Successful Science Communication: Telling It Like It Is*. Cambridge University Press.

Gregory, J. and Miller, S., 2000. Science in public. Basic Books.

Holliman, R., Whitelegg, L., Scanlon, E., Smidt, S. and Thomas, J., 2009. *Investigating science communication in the information age: Implications for public engagement and popular media*. Oxford University Press.

Irwin, A., 1995. Citizen science: A study of people, expertise and sustainable development. Psychology Press.

Public Understanding of Science, Special issue. See <u>http://pus.sagepub.com/content/23/1.toc</u> Stilgoe, J., Lock, S.J. and Wilsdon, J., 2014. Why should we promote public engagement with science?. *Public Understanding of Science*, 23(1), pp.4-15. *Other books of interest:*

Bauer, M.W. and Bucchi, M. eds., 2008. *Journalism, science and society: Science communication between news and public relations*. Routledge.

Brake, M.L. and Weitkamp, E. eds., 2009. *Introducing science communication: A practical guide*. Palgrave Macmillan

Cheng, D., Claessens, M., Gascoigne, T., Metcalfe, J., Schiele, B. and Shi, S., 2008. Communicating science in social contexts. *New Models, new Practices (Berlin, 2008)*.

Gilbert, J.K., Lewenstein, B.V. and Stocklmayer, S.M., 2013. *Communication and Engagement with Science and Technology: Issues and Dilemmas: a Reader in Science Communication*. Routledge.

Hecker, S., Haklay, M., Bowser, A., Makuch, Z., & Vogel, J. (Eds.). (2018). *Citizen Science: Innovation Open Scien*. UCL Press. See ebook open access at: <u>https://www.ucl.ac.uk/ucl-press/browse-books/citizen-science</u>

Holliman, R., Thomas, J., Smidt, S., Scanlon, E. and Whitelegg, L., 2009. *Practising science communication in the information age: Theorising professional practices*. Oxford University Press.

Essential and other readings:

All essential readings will be listed on and available via Moodle, unless specified. Further details on readings for the module and assessments will be posted on Moodle.

You are encouraged to start your own research to find readings and sources that relate to the module materials, and to take a general interest in key public engagement debates, controversies, and breakthroughs throughout the module. Here are some useful sources to start with:

Online Journals:

Public Understanding of Science: <u>http://pus.sagepub.com</u> Science, technology & human values: <u>http://sth.sagepub.com</u> Science Communication: <u>http://scx.sagepub.com</u> Journal of Science Communication <u>http://jcom.sissa.it</u>

Useful websites:

- Sciencewise: <u>http://www.sciencewise-erc.org.uk</u>
- Involve <u>https://involve.org.uk/</u>
- Zooniverse: <u>https://www.zooniverse.org</u>
- Beacons for Public Engagement: <u>http://www.publicengagement.ac.uk/work-with-us/completed-projects/beacons</u>
- British Science Association: <u>http://www.britishscienceassociation.org</u>
- Science Grrl: <u>http://sciencegrrl.co.uk</u>
- The UCL Public Engagement Unit: <u>https://www.ucl.ac.uk/public-engagement</u>
- National Co-coordinating Centre for Public Engagement: <u>http://www.publicengagement.ac.uk/explore-it</u>
- UCL Public and Cultural Engagement (PACE): <u>http://www.ucl.ac.uk/pace</u>
- Wellcome trust: <u>http://www.wellcome.ac.uk/funding/public-engagement</u>
- RCUK Public Engagement: <u>http://www.rcuk.ac.uk/pe/</u>
- Center for Public Engagement with Science & Technology: <u>http://www.aaas.org/pes</u>
- The Royal Institution: <u>http://www.rigb.org/about/mission-and-vision</u>
- The Times Cheltenham Science Festival: <u>http://www.cheltenhamfestivals.com/science</u>
- Think Lab: <u>http://www.think-lab-web.co.uk</u>
- Newton's Apple: <u>http://www.newtons-apple.org.uk</u>

Do not forget to read and follow relevant blogs, news stories, and twitter feeds of relevant institutions and scientific figures in the public domain (such as Brian Cox and UCL's own Hannah Fry), and relevant TV and Radio programmes.

Important policy information

Details of college and departmental policies relating to modules and assessments can be found in the STS Student Handbook <u>www.ucl.ac.uk/sts/handbook</u>

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