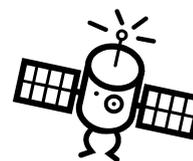


HPSC 1008

Introduction to Science Communication

2011-12 session



Course convenor: Dr Simon Lock

Other tutors: Dr Karen Bultitude, Hsiang-Fu Huang

Emails: simon.lock@ucl.ac.uk

Office Hours:

Simon Lock: Tuesday 11am – 1pm

Available by appointment at other times – email first please.

About the department

You are advised to familiarise yourself with the STS Student Handbook and consult them on all procedural matters. The notes are available on the departmental web-site at <http://www.ucl.ac.uk/sts/study/bsc>

Timetable

Lectures: Mondays 11.00-12.00am in Medawar Lankester Lecture Theatre

Tutorials: Mondays 12.00pm - 1.00pm Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

The tutorial is **compulsory**, and you will undertake some preparation for it between the lecture and the tutorial on the following Monday. Groups will be allocated in Week 1. As the term progresses other times will be scheduled for individual supervision of your Projects. The coursework requirement is described below.

Course outline and assessment

The course consists of a series of topic-based lectures and discussion-style tutorials that will introduce you, via a broad survey, to the public dimensions of science and technology. It explores the relationship between the professional world of science and the social, cultural and personal spaces in which science contributes to the shaping of contemporary society. It will encourage you to draw on your own experience of science outside of your formal education, and will alert you to the many arenas in which science plays a part in public life.

The course aims to impart knowledge and understanding, at an introductory level, of:

- Public spaces for science, including the mass media, science museums and everyday life

- Media and processes for science communication
- Concepts in public understanding of science
- How science becomes newsworthy
- How science is portrayed in literature and film
- How science is represented in museums
- How science reaches consumers
- How science is used in the political arena



The course is taught in two classes per topic over one term. The first class will be the lecture on the Monday as outlined in the session summaries below. This class will equip you, both intellectually and practically, for the second class, on the following Monday morning, which will be a tutorial.

The Weekly Tutorial

You will bring to the tutorial an item of research material that illustrates an aspect of that week's topic (such as a news cutting, a poem, items from an advertising campaign or an activist pamphlet). You should annotate or review your research material and be prepared to discuss it in class. Please ensure that you give yourself some time between the lecture and the seminar on the following Monday for finding this material. **You are required to collect your materials and annotations or reviews, and submit the work for assessment.** This work will comprise your Notebook which is an assessed piece of work (see below).

Tutorial groups will be assigned in the first week. **Please note that these tutorials are a compulsory part of the course, failure to attend and subsequently submit your notebook will result in you not completing the course.**

Course Readings

The notes that you take in lectures will not be detailed enough for you to fully understand a topic or to write an essay on that topic. It is therefore essential that you make use of the reading list.

- The reading list is divided into essential and additional reading - you are *not* expected to read all of the material.
- You will be expected to read all of the required reading (although not necessarily all in the same amount of detail). This amounts to one or two pieces each week.
- If you cannot get hold of the *required* reading, then you should read an item from the key reading list instead.

All of the readings, web resources, and Library listings are listed, and many can be directly accessed on the course Moodle pages. You will have access to the Moodle pages once you have been registered for the course on PORTICO.

The core text for this course is the book *Science in Public: Communication, Culture & Credibility* (New York: Plenum/Perseus/Basic Books, depending on the date) by Jane Gregory and Steve Miller (£11.99 from Waterstones). This is a secondary text – that is, it collects and comments on the work of many different scholars – and it will prepare you for the often challenging primary literature – the work of those scholars themselves – that you will meet if you go on to study science communication at higher levels. For some classes, you will be required to read parts of *Science in Public* before class. Three other very useful books are *Science, Culture and Society: Understanding Science in the 21st Century* (Polity Press), by Mark Erikson, *Investigating science communication in the information age: implications for public engagement and popular media* edited by Richard Holliman et al. (Oxford University Press), and *Introducing science communication* edited by Mark Brake and Emma Weitkamp (Palgrave Macmillan).

You are also encouraged to use the internet for research. However make sure you reference the full web address, the site title and date visited. Be critical of what you read and be careful of / avoid purely descriptive sites such as Wikipedia – We will be looking for evidence of some hard thinking and argument in your essays, not simple regurgitation of basic information. **Also note that plagiarism, particularly involving internet sources, will be treated as a severe exam irregularity.**

Assessment

Notebook

The first assessment, which will be called the Notebook, should contain material relevant to every seminar class. It should consist of a short reflection each week (no more than 800 words) on your research and analysis for the tutorial and any relevant discussion. Any research materials and examples you have collected during your research should also be handed in with your reflections, annotations or reviews. The Notebook counts for 25% of the overall course mark.

Please note that attendance should be reflected accurately in your Notebook. The seminars are a compulsory part of the course, and failure to attend and subsequently submit your Notebook will result in you not completing the course. **You will be asked to submit a hard copy of your notebook over reading week (half way through the term) so that you can get some feedback on your progress.**

The electronic written parts of your finished Notebook should be submitted via Turnitin on Moodle. A hard copy of your Notebook which includes your research materials must also be submitted to Simon's pigeonhole in the Departmental office (22 Gordon Sq). Both the electronic version and the hard copy must be submitted in order for you to complete this assessment.

The deadline for the submission of the Notebook is Friday 16 December 2011.

Project

During the course you will select, with the agreement of the course tutor, a topic of particular interest to you, and research it in more depth. Topics might be the role of forensic staff in police TV programmes, the prominence of environmental activists as sources for news quotes giving examples from the press, or the variety of information available on cosmetics packaging. You are required to write a commentary on, and analysis of, your chosen topic of no more than 2000 words. This assessment, which is

called the Project, counts for 25% of the overall course mark. The Project will be supported by individual tutorials with Simon.

You should expect to have at least two individual tutorials: the first will be to agree your topic and to map out your research and writing. The second will be to discuss your progress as your Project develops. These tutorials will be arranged with each student individually after reading week. Please tell Simon as soon as you have chosen a topic.

Your Project should be submitted via Turnitin on Moodle. If your Project includes materials such as a dvd, press cuttings or images, you must also submit a hard copy of the complete document to Simon's pigeonhole in the Departmental office (22 Gordon Sq).

The deadline for the Project is Monday 19 December 2011.

You are strongly advised to keep a back-up copy of all your coursework.

Late submission of coursework

Late submissions will be penalized: **please note the college-wide rules for late submission of coursework.** The full allocated mark will be reduced by 5 percentage points for the first working day after the deadline for the submission of the coursework. The mark will be reduced by a further 10 percentage points if the coursework is submitted during the following six days. After one week coursework will not be marked.

Exam

The final part of the assessment is a written exam which counts for 50% of the overall course mark. Affiliate students attending UCL in Term 1 only should discuss alternative assessment with the course tutor.

Students must submit all coursework and sit the exam to be considered complete for this course.

Studying Science communication: What is critical research?

It is worth bearing in mind that this is a course about science communication, the theory, its practice and its implications. Thus your write up should focus on this as the main area of analysis. You should not simply provide a descriptive account of the content of the science communication studied. The content of a piece of science communication is only relevant insofar as it allows you to answer more interesting questions about it (not just what did it say, anyone can read/watch something to answer that!)

The sorts of questions you might want to answer as part of your write up are as follows (this is not an exhaustive list and you will be able to think of other interesting things to say. Treat this as a starting point):

Where did your materials come from? Why might this be relevant to the content and how might the same message be different in a different context?

Who might read/watch it? (what is the intended audience?)

What sort of model of science communication is implied here?

How does what you are looking at fit with the historical trends in science, communication and culture that have been discussed in class?

Whose interests are being served here?

How does this piece of communication fit with models of public understanding of science?

How does this medium of science communication compare to the other you have looked at?

To answer these sorts of questions you need to provide evidence. Your evidence in this case will be the content and/or specific features of the piece of science communication. So try to point to the relevant sections/sentences/features of the piece when answering the question.

Objectivity and Subjectivity

It is very important when studying science communication to bear in mind the difference between an operational and normative statement. Operational statements describe the way things are, so are statements about how things work, or operate. We tend to be more interested in these sorts of understandings. Normative statements will describe or assert how things **should or should not** work or operate, thus tend to stem from some sort of value statement. We might be interested in identifying the use of normative statements by others, but try and stay away from making your own. Note the difference between the following statements: “The *Daily Mail* is bad because it sensationalises all the science stories” and “Many of the science stories in the *Daily Mail* are written in a way that likely aims for a heightened emotional response from the reader, which X argues is irresponsible” Critical thinking does not mean being negative, nor finding fault with everything, it means standing back to take a look at the evidence and comparing that to what has been said in the academic literature

Bear in mind also the difference between the research literature and your own experience. This is particularly important when dealing with popular culture or media, subjects which we are all familiar with and have experiences of in our every day lives.

You may experience the mass media and popular culture in one way, and thus form your own opinions about them but this does not mean that your experiences and opinions are representative of everyone else’s. Sociology is about society not individuals. So be very wary of making statements like, “the public will think this...”, “this won’t make sense to the public...” or “this will make everyone think x”. You may feel that way, but unless you have concrete evidence backing up such claims, these are simply unsubstantiated assertions based upon one person’s experience.

You are at university to study these things in an academic and critical manner, so you should always ground your arguments and observations within the academic literature you have read. You should therefore justify your arguments through such mechanisms as sourcing, citing data, referencing, providing logical justification etc. There is nothing wrong with having personal opinions concerning an issue, but we want to see that you have engaged with the context and issues rather than simply writing a polemic, one-sided and unsubstantiated editorial on the topic! If you want to bring your own opinions or values to bear on your research, you need to make sure that you reflect on how these articulate with other viewpoints or values from within the literature.

Course objectives

By the end of this course, you should have:

- Knowledge and understanding of the basic concepts and scope of science communication
- A broad understanding of the social and political contexts and functions of science in public
- Skills in written and spoken communication
- Skills in relating personal experience to the ideas, tools and values of academic research
- Skills in the recognition, collection and analysis of research materials
- Skills in argumentation, listening and constructive dialogue
- Confidence in contributing in class

Topic 1:

Lecture on Monday 3 October 11.00am

Tutorial on Monday 10 October: 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

Introduction: What and where are the public spaces for science?

This week's class will explore the many contexts and means by which science is experienced in the world outside of its professional community. It will also look at the history of science in the public sphere. These spaces will be explored in more detail as the course progresses.

Required reading for this class is *Science in Public, Chapters 1 and 2*

Further reading:

Jane Gregory (2004) 'Who is the man on the street?', *RSA journal* July 2004 – available on Moodle

Mark Brake (2010) 'The History and Development of Science and Its Communication' in Brake and Weitkamp (eds), Chapter 1

Advanced Reading:

Chapters 1-3 in Hannay, Alistair, (2005) *On the Public*, (Routledge) – available on Moodle.

Dan Hind (2011) *The Return of the Public*, Chapters 1 – 2 (hard copies available from Simon)

This week's tutorial will discuss the many ways in which different media and forums are used for communicating science.

Research Task

Your assignment is to collect and report on two experiences from everyday life where scientific information is made available to non-experts. **Only one of these can involve the mass media (newspapers, tv, internet).**

Your research task and useful and relevant discussion from the tutorial should then be written up for your Notebook (see instructions above)

By the end of this week you should have some understanding of what it means for science to be 'public', and you should be alert to the many public spaces in which non-scientists experience science.

Topic 2:

Lecture on Monday 10 October 11.00am

Tutorial on Monday 17 October 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

Science, communication and culture

This class will develop the idea that science communication does not take place in a vacuum, but in a context formed of the many other forms of knowledge and communications with which it co-exists in science-based societies. It will look briefly at the way the cultural context for science has developed historically, and whether or not there is a divide between science, on the one hand, and general culture, on the other.

Required reading for this class is: **Science in Public; chapter 2.**

Further reading:

- Hook & Brake's chapter on "Science in Popular Culture" in Brake and Weitkamp (2009)
- Stefan Collini's Introduction to C.P. Snow's *The Two Cultures* (Canto: 1993);
- A recent(ish) discussion of the two cultures
<http://www.guardian.co.uk/science/2007/jul/01/art>;
- Mark Erikson, *Science, Culture and Society: Understanding Science in the 21st Century*, Chapter 6: Popular Science
- Geoffrey Cantor's piece on science and religion in *Nature*, **403**, 831 (24 February 2000)
<http://www.nature.com/nature/journal/v403/n6772/full/403831a0.html> and the ensuing correspondence which you can find through an online search.
- *Nature*, 459, 10 (7 May 2009), Doing good, 50 years on, editorial and three essays

All online sources available on Moodle.

For this week's tutorial you will discuss how different understandings of science leads to differing relationships between science and other aspects of culture, such as religion.

Research Task

Undertake an online search to find recent discussions about the "two cultures" you'll be surprised where this conversation pops up. You might, for example find it in discussions about science and religion, science and art, science and humanities. Be prepared to summarise the arguments in what you find, and develop your own opinion on this issue.

By the end of this week you should understand:

- That science communication does not take place in a cultural vacuum;
- That the cultural environment for science communication has developed historically (and is still doing so);
- That the issue of a cultural divide is one that is still debated.

Topic 3:

Lecture on Monday 17 October 11.00am

Tutorial on Monday 24 October 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

What is Science Communication?

This class will investigate the variety of activities that come under the heading of “Science Communication”. We will look at who is doing the communication, how, and with what purpose in mind. What role is the communicator playing and on what authority, if any?

Required reading for this class is: *Science in Public*; chapter 9

and

B. Trench and M. Bucchi, *Science communication, an emerging discipline, Jcom* 09(03) (2010) pp. 1-3.

Further reading (All online sources available on Moodle):

- Karen Bultitude’s forthcoming chapter on the whys and how’s of science communication (provided for you as a pdf on Moodle).
- This excellent Wiki entry on [Science Communication in the UK](#) gives you all sorts of information on the main players, initiatives and culture.
- Another online resource - [Psci-com](#). Lots of links to relevant documents and events in the Science Communication world.
- The British Association for the Advancement of Science’s report, [Connecting science](#), especially the first 21 pages.
- Also glance through this [Science Communication Awards Brochure](#) for an insight into the ‘science communication culture’.

This week’s tutorial will discuss what audiences are being targeted by the various science communication activities discussed in the lecture, and what implicit and/or explicit assumptions are being made about those audiences.

Research Task

Your assignment is to find the same piece of science communicated in two different places for different audiences. Compare and contrast the context, context and style of the two pieces. Try not to pick two pieces from different newspapers.

By the end of this week you should understand:

- That science communication is carried out by a wide range of people;
- That they have a variety of motivations for doing this;
- That they may play a variety of roles, from educator to entertainer, to which they are more or less well suited;

- That the process of communication requires making assumptions about the audience ...
- ... that may or may not be justified.

Topic 4:

Lecture on Monday 24 October 11.00am

Tutorial on Monday 31 October 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

What is “The Public Understanding of Science”?

This class will look at an area that – until recently – was known as “The Public Understanding of Science” (PUS). It will discuss notions of PUS as a “mission” or as “social engineering”, and models of science communication that accompany these notions. These will be contrasted with other approaches that see PUS as a means of empowering individuals and groups within society, a topic that will get further attention in Course Week 10.

Required reading for this class is: Simon J Lock, (2011), ‘Deficits and dialogues: science communication and the public understanding of science in the UK’, in David Bennett and Richard Jennings, eds, *Communicating Science For Scientists* (Cambridge: Cambridge University Press). (as this has not quite been published there’s a chapter proof on Moodle)

Further reading:

- *Science in Public*, chapter 4
- Clare Wilkinson’s chapter in Brake & Weitkmap (2010) ‘Science and the Citizen’.
- The original report from the Royal Society on ‘The Public Understanding of Science, 1985 (Royal Society).
- Sergio Sismondo's chapter on Expertise and Public Understanding (Chapter 16) in *An introduction to science and technology studies* (2004), (Malden, MA ; Oxford: Blackwell)
- Peter Brok's chapter's 5 and 6 in *Understanding Popular Science* (2006, Open University Press), cover the development of Public Understanding of Science
- Brian Wynne’s essay on public understanding of science in *Handbook of Science & Technology Studies*, edited by Jasanoff *et al.* (Sage: 1995), pp. 361-388

All online sources available on Moodle.

For this week’s tutorial you will discuss approaches to PUS and the features that accompany them. The discussion will bring out the strengths and weaknesses of these approaches.

Research Task

Your assignment will be to read one of the following articles from the launch issue (Vol. 1 no. 1) of the journal *Public Understanding of Science*. The journal is available online in College. The articles are by Bodmer, Leblond, Fayard and Miller. Choose two, read them and make notes so that you can discuss the approaches to PUS that are being manifested in the articles, as well as any other features that you think are worthy of discussion. For some interesting contrasts choose one of Bodmer or Miller and one of Leblond or Fayard.

By the end of this week you should understand:

- The basic concepts underlying the area of PUS;
- The various approaches to this area;
- Their strengths and weaknesses;
- That approaches to PUS have developed over a period of time.

<p>Topic 5: Lecture on Monday 31 October 11.00am Tutorial on Monday 14 November 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A</p>
Science, engagement and policy
<p>This class will discuss the way in which “official” approaches to science communication – from the scientific community and governmental agencies and spokespersons – have developed over the past decade or so, and why. It will look at the issue of authority in science communication, and questions of how greater public participation may be facilitated. It will point to the distinctions between promotion and information in motivations for science communication.</p>
<p>Required reading for this class is: Gregory, J and Lock, SJ (2008), "Public Understanding of Science': Public Engagement as a Tool of Science Policy in the UK", <i>Sociology Compass</i>, 2: 4</p> <p>Further Reading:</p> <ul style="list-style-type: none"> • Jack Stilgoe and James Wilsdon, ‘The new politics of public engagement with science’, in Holliman et al. (eds) <i>Investigating Science Communication in the Information Age</i>, 2009, Chapter 1.2 • Alan Irwin, ‘Moving forward or moving in circles? Science communication and scientific governance in an age of innovation’ in Holliman et al. (eds) <i>Investigating Science Communication in the Information Age</i>, 2009, Chapter 1.1 <p>Reports from the Parliamentary Office of Science and Technology on science communication and public engagement: POSTnote, No. 153 POSTnote, No. 189</p>
<p>Research Task</p> <p>Your assignment is to look at the content of at least two government department websites (e.g. BIS, GOScience, DEFRA) to see what sort of information it provides on a contemporary scientific issue such as climate change, synthetic biology, or nanotechnology and at whom it might be aimed. Consider especially the contrast between the differing communications strategies, e.g. the promotion of the new technology and attempts to facilitate public engagement or consultation.</p> <p>By the end of this week you should understand:</p> <ul style="list-style-type: none"> • That a variety official bodies are involved in science communication, as part of their duties and as part of their efforts to promote themselves and their activities; • That in doing so, they have “authority”; • That this then requires measures to allow for public involvement, particularly in the area of policy making.

The week 7 – 11 November is Reading Week: there are no classes. You must hand in your notebook to Simon before Reading Week.

After Reading Week, you should expect to have two individual tutorials on your Project. These will be arranged with Simon at mutually convenient times.

Topic 6:

Lecture on Monday 14 November 11.00am

Tutorial on Monday 21 November 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A

Science in the News

This week's class explores the place of science in reporting in news media. It asks: what kinds of information are communicated; which agencies and professionals contribute to the news process, and whose interests are served?

Required reading for this class is *Science in Public*, Chapter 5. This chapter will give you some factual knowledge about media terms, processes and practices.

Further reading:

- Stuart Allan's chapter in Holliman et al. (eds) *Investigating Science Communication in the Information Age*, 2009, Chapter 4.1
- Bruce Lewenstein's essay on science and the media in *Handbook of Science & Technology Studies*, edited by Jasanoff *et al.* (Sage: 1995), pp. 343-360
- Ben Goldacre's book *Bad Science* contains lots of examples of scientists and science in the media. Notice that many of the same normative judgements about what the media should be doing with science discussed in the lecture are present here.

This week's tutorial is about what science stories get covered in the press, and why.

Research Task

Your assignment is to buy two newspapers on the same day: one you know well, and one you never read. Compare the science coverage in the two papers. Think about: why a particular story made the news; why some stories are in one newspaper but not others; how other news events shape the news space for science.

By the end of this week you should have some understanding of basic terms in media studies and be aware of the basic processes and professions involved. You should also have a sense of the challenges of media research.

<p>Topic 7: Lecture on Monday 21 November 11.00am Tutorial on Monday 28 November 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A</p>
<p>Science in new media</p>
<p>This week's class explores the ways in which new media may be used to communicate about scientific topics. Interactive social media such as Facebook and Twitter will be considered, as well as more 'broadcast' mechanisms such as podcasting, blogging and open notebooks. Audience demographics for each of the different media will be considered in light of ensuring that the medium is best suited to the target recipients.</p>
<p>Required reading for this class: Research Information Network (2011) "Social media: A guide for researchers". Available from http://www.rin.ac.uk/system/files/attachments/social_media_guide_for_screen.pdf</p> <p>Further reading:</p> <ul style="list-style-type: none"> • Trench, B. (2008) "Internet: Turning Science Communication Inside-Out" in Bucchi and Trench (Eds) <i>Handbook of Public Communication of Science and Technology</i>. (Routledge). • Various chapters in Holliman et al. (eds) <i>Practising Science Communication in the Information Age Theorising Professional Practices</i>, 2009, Oxford University Press, e.g.: <ul style="list-style-type: none"> ○ Chapter 2.2: Matthew Chalmers: Communicating physics in the information age ○ Chapter 3.1: Scott L. Montgomery: Science and the online world: realities and issues for discussion ○ Chapter 3.2: Richard Gartner: From print to online: developments in access to scientific information <p>All online sources available on Moodle.</p>
<p>This week's tutorial will involve group critiques of specific examples of science communication using new media.</p>
<p>Research Task Your assignment is to identify and briefly review <u>one</u> example of <u>each</u> of the following mechanisms for communicating scientific topics using new media:</p> <ul style="list-style-type: none"> • Podcast • Blog • Twitter or Facebook <p>If you are unsure what examples you should select please contact Karen Bultitude in advance of the tutorial. Consider each of the examples you have chosen in light of the following issues: how have the scientists been presented (e.g. personal vs professional personas); how does the medium encourage or detract from collaboration and dissemination of scientific results; and what audiences are best served by the different media types. Remember, you are expected to conduct a critical analysis of this topic, not just describe each of the examples you have found.</p>
<p>By the end of this week you should: comprehend different types of new media and how it is used to communicate science; understand the motivations and barriers that affect scientists' use of these new media; be aware of the importance of audience targeting when selecting new media.</p>

<p>Topic 8: Lecture on Monday 28 November 11.00am Tutorial on Monday 6 December 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A</p>
<p>Science in fiction</p>
<p>This week's class explores the ways in which science is used in media and genres traditionally considered as 'arts,' concentrating mostly on literature and film. It will consider the difference between fictionalised stories about science and science fiction, the history of science in the arts, and the potential of the arts as a means for science communication.</p>
<p>Required reading for this class: Chapter 2 in Allen, Stuart, (2002) <i>Media, Risk and Science</i> (Open University Press), pp. 12 – 38. (available on Moodle)</p> <p>and</p> <p>Rosalyn Haynes' article, 'From Alchemy to Artificial Intelligence: Stereotypes of the Scientist in Western Literature', <i>Public Understanding of Science</i>, 12:3, pp. 243-253 (2003)</p> <p>Further reading:</p> <ul style="list-style-type: none"> • Karlheinz Steinmuller's essay on science fiction and science in the twentieth century from <i>Science in the Twentieth Century</i>, edited by Krige and Pestre (Harwood: 1997). • Chapter 7, Cultural studies and science fiction, in Mark Erickson, <i>Science, Culture and Society: Understanding Science in the 21st Century</i> (Polity Press). • Communicating Science in Fiction. Chapter in Open University Course Reader, MSc in Science Communication: Holliman, Thomas, Smidt, Scanlon, Whitelegg (eds), <i>Practising Science Communication in the Information Age</i>. Oxford University Press, 2008. • Popular Science Books. Chapter in Massimiano Bucchi and Brian Trench, <i>Handbook of Science Communication</i>, Routledge 2008. • Roger Silverstone's mythic/mimetic framework is described in the journal paper 'Narrative strategies and television science', in <i>Media, Culture & Society</i> vol.6, p.377 (1984). <p>All online sources available on Moodle.</p>
<p>This week's tutorial will be a discussion of your analyses of the representations of science and scientists in feature film.</p>
<p>Research Task Your assignment is to write review of a feature film that you have seen VERY recently that has science as a theme or has a scientist among the characters. Simon has some DVDs you can borrow if you haven't seen anything relevant recently. You should consider: the representation of the scientist; the role of science in the narrative; the relationships with science and scientists of the non-scientist characters; the tone of the representation of science (positive or negative). Do not just describe the plot!!!</p>
<p>By the end of this week you should: have some factual knowledge about the place of science in the arts; have some understanding of the kinds of analysis made of science in the arts; and be alert to the ways in which science and scientists appear and are used in such situations.</p>



<p>Topic 9: Lecture on Monday 5 December 11.00am Tutorial on Monday 12 December 12.00pm, Group A in Gordon Square (16-18) B10; Group B in South Wing B3A</p>
<p>Science and the Consumer</p>
<p>This week's class looks at scientific information given to consumers, for example on food and medicine packaging and in advertisements, and considers the relationship between consumer behaviour, government policy and market forces.</p>
<p>Required reading for this class is to go to the Consumer's Association Website: www.which.co.uk, and type in 'Food Labelling' into the search box. Have a read of some of the press releases, reports etc on their challenges to some food labelling claims.</p> <p>A few good short pieces on science in Advertising: Article by Phillip Strange - http://www.lablit.com/article/426 Article in The Guardian - http://www.guardian.co.uk/business/2007/mar/23/businesscomment Article in The Telegraph - http://www.telegraph.co.uk/science/science-news/3344030/Baffled-by-the-beauty-adverts-So-is-a-Nobel-prizewinner.html</p> <p>Further reading:</p> <ul style="list-style-type: none"> • Rachel Dodds, Efrat Tseelon and Emma Weitkamp (2008), Making sense of scientific claims in advertising. <i>Public Understanding of Science</i>, 17, 211-230. • Nelkin, D (1987), <i>Selling Science: How the press covers science and technology</i> (W.H., Freeman Press) • A nice paper looking at health claims in food packaging by P. G Williams, (2005), Consumer understanding and use of health claims for food - http://ro.uow.edu.au/hbspapers/4/ • Have a look through the Food Standards Agency's Web Pages on Food Labelling. - http://www.food.gov.uk/foodlabelling/ • The Government's information pages on the Traffic Light Scheme. - http://www.eatwell.gov.uk/foodlabels/trafficlights/ • Gill Cowburn and Lynn Stockley, Consumer understanding and use of nutrition labelling: a systematic review, Public Health Nutrition (2005), 8: 21-28 (available online in UCL)
<p>All online sources available on Moodle.</p>
<p>This week's tutorial is about the ways in which consumer goods are labelled, and how those labels are used by consumers and the ways in which science is used in advertising.</p>
<p>Research Task Your assignment is to collect two examples of scientific information from food or other consumer goods packaging and one example of an advertisement that uses science to sell its product. Reflect on what information is given, what it means to you, and how you might use it.</p> <p>By the end of this week you should have some factual knowledge about the debates over the use of scientific claims in consumer products, and be able to reflect critically on the different kinds of information given to consumers.</p>

Topic 10:

Lecture on Monday 12 December 11.00am

No tutorial for this topic (still must be written up for notebook before submission)

Science in Museums

This week's class will explore the history and theory of science museums. It will discuss the purpose of collections of scientific artefacts and natural objects, and consider how science/society relations are reflected in the changing style of science museums through the twentieth century.

Required reading for this class is *Science in Public* Chapter 8.

Further reading:

- Bernard Schiele, 'Science Museums and Science Centres' in Bucchi and Trench (eds), 2008, *Handbook of Public Communication of Science and Technology*, (Routledge), pp. 27 – 40.
- Alison Boyle's chapter in Brake & Weitkamp (2010)
- John Durant's introduction to Durant, J (ed) (1992) *Museums and the Public Understanding of Science* (Science Museum: London)
- Frank Oppenheimer's essay on his rationale for science centres, <http://www.exploratorium.edu/frank/rationale/rationale.pdf>
- An excellent essay by Sharon MacDonald on Exhibitions and the Public Understanding of Science - <http://www.pantaneto.co.uk/issue13/macdonald.htm>

All online sources available on Moodle.

This week's tutorial will be a discussion of your experiences as museum visitors.

Research Task

Your assignment is to visit the Science Museum in South Kensington, where you should look at one traditional gallery in the main building and one of the newer exhibitions in the Wellcome Wing. Think about: what it is that you are being shown; what media are used; what choices have been made and why in the assembling and exhibiting; and what messages you felt were communicated to you.

By the end of this week you should know something of the history of science museums and be able to take a critical view of museums and exhibitions.