Communicating Psychology & Neuroscience

PS4094

Student Handbook

2016/17

Module co-ordinator: Karen Spencer

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Aims and objectives

The aim of this module is to provide final year students within the School of Psychology and Neuroscience with first-hand experience of science communication through a series of expert led master-classes (e.g. Bright Club, BBC, print journalists, science bloggers), presentations and interaction with new media (e.g. podcasts, blogs, Twitter). Students will gain personal experience of a range of science communication media and will also have the opportunity to meet and learn from professionals in this field. This module will enable students to gain substantial experience of working to tight deadlines, evaluating how the media translates psychological/neuroscience findings and of communicating complex ideas at various different levels, including presenting work to the press, the public and school children. Topics covered by the course will include: why scientists must communicate with the public; how psychology/neuroscience hits the headlines; evaluating media coverage; using new media to get the message across and designing a science exhibit. While of particular value to students aiming for a career in public engagement, these core skills are equally important for any career that requires good communication, including post-graduate study. In addition the course will require the students to monitor relevant periodicals and evaluate several new studies in psychology/neuroscience and so should expose students to the latest trends within the field.

Course organisation/administration

The module will comprise of a series of weekly 2h expert talks/masterclasses given by both Academic staff at St Andrews within the School and external experts (e.g. BBC, the Courier, RCUK media relations, Guardian Science blogger) brought in to explain specific skills/media. The first half of these sessions will involve a lecture-style talk given by an expert, followed by an interactive session, with a Q&A or a practical exercise that relates to the previous talk or another relevant topic. These sessions will focus on student-expert interaction in order to maximise the flow of information and facilitate skills acquisition. Relevant topic-specific reference material will be available to the students prior to each session via Moodle and/or email. The module will have a dedicated twitter account and students will be encouraged to interact with these media – commenting and showcasing interesting new research, details will be given at the first session in week 1. Each assessment will involve reading very recent paper(s) relevant to each student's interests in psychology/neuroscience followed by the production of an engaging piece of writing/presentation that conveys the importance and a critique of the findings to the general public. All students will therefore need to know how to find new and exciting papers. A summary of how to find newly published works (e.g. WOS or journal updates, Twitter, RSS feeds) will be given at the start of the course in week 1.

The module co-ordinator is Karen Spencer. I can be reached via email (kas21@st-andrews.ac.uk) or found in room 1.22 in Psychology. Karen does not have office hours as such, but has an open door policy. If you need to see her then you have two options; either pop into her office and if she can help right away she will, or email her and she will respond within 24 hours to give you an appointment. Other than that I will be available at each weekly session. Paul Gardner is also a Lecturer on this course and he can be contacted via email at plg@st-andrews.ac.uk.

Assessment

The course has 5 continuous assessments [reference sections not counted in word count in any of these]

1) Presentation [Podcast/You Tube video]. Around 5 minutes based on the student's choice of topic/paper that they will source themselves. Students will be expected to describe and evaluate the paper/topic in lay terms. The research should be current and relevant to Psychology/Neuroscience and be less than 6 months old. This element will evaluate understanding of the research topic area, the ability to communicate scientific ideas effectively verbally, the ability to engage a wide audience, the use of appropriate sound effects or visual aids and of discussion groups and/or interviews. DEADLINE for submission: 10th March 2017 (week 7).
2) Presentation/Exhibition at science fair. 5-10 minute presentation based on exhibit designed by students. Presentation and exhibit will be assessed by two staff [50%] and public evaluation questionnaires [50%, example on Moodle]. DEADLINE for submission: Science fair will take place Saturday 15th April (week 10), 11am – 3pm.
3) Blog posting [essay]. 1000 words [max] based on the student's choice of topic/paper that they will source themselves. The research should be current and relevant to Psychology/Neuroscience and be less than 6 months old. Note students cannot use the same article/topic more than once for any assessment element. This written piece will evaluate the ability to understand and evaluate the importance of a research paper/topic and communicate this to a lay audience. It will need to introduce a topic and its importance, as well as briefly describe the focal study, followed by an evaluation of its relevance to the general public. DEADLINE for submission: 7th April 2017 (week 9).
4) Newspaper article [short essay]. 2 x 500 words [max.] based on student's choice of topic/paper that they will source themselves. The research should be current and relevant to Psychology/Neuroscience and be less than 6 months old. Note students cannot use the same article/topic more than once for any assessment element. This written piece will assess the ability to: understand the research area, write concisely about complex ideas and engage a wide audience. DEADLINE for submission: article 1: 10th February 2017 (week 3); article 2: 24th February 2017 (week 5). Feedback will be given in between articles.

An extension request to a deadline can only be made using the online form (available on the School of Psychology undergraduate web pages). If you think that you have a legitimate reason why you cannot complete a piece of project work in time, you must apply for an extension well before the deadline.

Timetable of lecture themes – please note that it may be subject to minor changes.

Week 1: General introduction to the course, assessment and how to find new research to write about. In this session we will show you how the course works. We will also spend some time looking at ways to find new and emerging research and how to start thinking about writing for the public. If you have a laptop/tablet it would be useful to bring it to the session as we can give you practical tips on which journals to monitor.

Week 2: How to engage with the public – presentation about the mechanics of presenting science. The second half of the session will involve practical exercises in presenting and writing.

Week 3: Science and the media – how we hit the headlines and how scientists can ensure accurate reporting of findings. This session will be led by Graham Russell a producer/director from the BBC, who has a vast amount of experience in translating science into popular TV shows (e.g. Inside the Animal Mind). Following this there will be a practical session on writing a news article.

Week 4: Evaluating the media coverage of studies - is it any good? This interactive session will entail a short introduction followed by a practical demonstration. You will get the opportunity to read papers and associated media coverage and evaluate the accuracy and subjectivity of the reporting. More information on how to write a news article.

Week 5: How to Podcast. This session will be led by Dr Rob Burriss, University of Northumberland, who runs his own podcast, 'http://www.robertburriss.com/podcast.html', as well as being a researcher. After an introductory lecture there will be an opportunity for a Q&A and then a practical demo of podcasting.

Week 6: Exploring different media. Here we will explore emerging ways to contact the public, particularly how You tube has now become a major stream of information. The session will involve a brief overview and then a practical session on making a video presentation. Video cameras will be used!

Week 7: The art of blogging: a how to guide. This session will be led by Dr Pete Etchells, Bath Spa University, who blogs for the Guardian [http://www.theguardian.com/profile/pete-etchells], but who is also a Psychologist actively involved in research. After an introductory lecture there will be an opportunity for a Q&A and then a practical demo of blogging.

Week 8: The funny side of science – humour as a way to engage the public. There will be an introductory session by Kate Cross a performer and lead of Bright Club St Andrews. More details about Bright Club can be found at http://www.funnyresearch.info/p/li-nks.html. There will be the opportunity to try out your funny side too.

Week 9: Science fair exhibit design session. This session will be given over to design and development of the science fair exhibit. You should start thinking about your exhibit before week 9 though!

Week 10: Science fair exhibit design session II. This will be a practical session assisting with the exhibit.

Week 11: Overview session/Q&A.

Useful links and reading list

http://www.britishscienceassociation.org/ - The British Science Association

http://scx.sagepub.com/ - Science Communication journal that discusses theory and practice

Iles, J. et al (2010). Neurotalk: improving the communication of neuroscience research. Nature Neuroscience, vol 11, pp 61-69.

Bowler M.T., Buchanan-Smith H.M., Whiten A. (2012) Assessing Public Engagement with Science in a University Primate Research Centre in a National Zoo.PLoS ONE 7(4): e34505. doi: 10.1371/journal.pone.0034505

Witchel, H. and Westling, C. (2013). Inputs and Outputs: Engagement in Digital Media from the Maker's Perspective. Excursions, vol. 4, no. 1. www.excursions-journal.org.uk/index.php/excursions/article/view/80

Kouper, I. (2010).Science blogs and public engagement with science: practices, challenges, and opportunities. International School for Advanced Studies, vol 9, no. 1. http://jcom.sissa.it/archive/09/01/Jcom0901(2010)A02/Jcom0901(2010)A02.pdf

Baram-Tsabari, A. & Lewenstein, B. V. (2013). Communication of Science An Instrument for Assessing Scientists' Written Skills in Public communication of Science. Science Communication, vol 35: 56: DOI: 10.1177/1075547012440634.

Transferable skills/Graduate attributes.

This course aims to expand your skill base. During the course you will be assisted to demonstrate original thought, construct a coherent argument or debate, and apply critical analysis and evaluation and reason from specific issues and examples to the general. You will need to demonstrate the use of an appropriate range of resources to the task at hand, which will involve engaging directly with current research, developments and skills in the discipline. You will gain experience of dealing with primary and secondary material and learn how to differentiate between them. The course also facilitates skills in active learning, reflective learning and will hone your creative skills. As you are able to choose the sources you writer about the course will also allow you to demonstrate independence thought and reasoning and improve your skill sin time management.