BS349-12 Science Communication

22/23

Department Life Sciences Level Undergraduate Level 3 Module leader Kevin Moffat Credit value 12 Module duration 10 weeks Assessment 100% coursework Study location University of Warwick main campus, Coventry

Description

Introductory description

The module will consider how science is communicated to different audiences and in different medias, drawing out issues around science in society, for example the roles and responsibilities of scientists and journalists in communicating scientific research and the public understanding of science. The skills that scientists need to competently communicate will also be explored.

Module web page

Module aims

- i) Awareness of the issues around communicating science
- ii) Introduce and develop skills in effective communication
- iii) Study and research on science communication in media, educational and global contexts.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Each 2-hour session is structured as a talk from an expert in the relevant area followed by and interactive seminar session including discussion, structured activities and preparation for

assessment:

- i) Introduction to science communication
- ii) Politics
- iii) Importance of empathy in communication
- iv) Introduction to video development
- v) Science Festivals
- vi) Storytelling as a vehicle
- vii) Science and the media
- viii) Scientific publishing
- ix) Science funding
- x) Research hustings

Learning outcomes

By the end of the module, students should be able to:

- By the end of the module, students should be able to:(i) Evaluate the effectiveness of communication in science
- (ii) Identify what makes science newsworthy
- (iii) Communicate scientific knowledge and ideas effectively and to a variety of audiences
- (iv) Evaluate the way science is presented in the media

Indicative reading list

The following books are useful as additional study.

Bowater, L. and Yeoman, K. (2013) Science Communication: a practical guide for scientists. Wiley-Blackwell.

Holliman, R. Whitelegg, E. Scanlong, E. Smidt, S. Thomas, J. (Eds) (2009) Investigating science communication in the information age: implications for public engagement and popular media. Oxford University Press.

Brake, M. and Weitkamp, E. (Eds.) (2010) Introducing science communication: a practical guide. Palgrave Macmillan.

Wilson, A. (Ed) (1998) Handbook of science communication with contributions from Jane Gregory, Steve Miller and Shirley Earl. IoP Publishing Ltd, London.

Holliman, R., Whitelegg, E., 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: New York.

Alley, M. (2003) The craft of scientific presentation: critical steps to succeed and critical errors to

avoid. Springer, New York.

Gregory, J. and Miller, S. (2000) Science in public: communication, culture and credibility. Plenum Trade, London.

Subject specific skills

- (i) Evaluate the effectiveness of communication in science
- (ii) Identify what makes science newsworthy
- (iii) Communicate scientific knowledge and ideas effectively and to a variety of audiences
- (iv) Evaluate the way science is presented in the media

Transferable skills

- 1. Critical appraisal of source material
- 2. Self directed learning
- 3. Adult learning

Study

Study time

Туре	Required
Lectures	10 sessions of 1 hour (8%)
Seminars	10 sessions of 1 hour (8%)
Private study	100 hours (83%)
Total	120 hours

Private study description

Independent learning, self directed learning and revision for assessments and video

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group A

	Weighting	Study time
Video	50%	
Video		
Essay/Coursework	50%	
5 x 500-word essays		

Feedback on assessment

Formative feedback on blogs and videos mid way through the module\r\n\r\n

Availability

Courses

This module is Optional for:

- Year 3 of UMDA-CF10 Undergraduate Integrated Natural Sciences (MSci)
- Year 2 of UIPA-C1L8 Undergraduate Life Sciences and Global Sustainable Development

This module is Option list A for:

- Year 3 of UBSA-C700 Undergraduate Biochemistry
- ULFA-C1A2 Undergraduate Biochemistry (MBio)
 - Year 3 of C1A2 Biochemistry
 - Year 3 of C700 Biochemistry
- UBSA-3 Undergraduate Biological Sciences
 - Year 3 of C100 Biological Sciences
 - Year 3 of C100 Biological Sciences
- Year 3 of ULFA-C1A1 Undergraduate Biological Sciences (MBio)
- UBSA-C1B9 Undergraduate Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
- ULFA-C1A3 Undergraduate Biomedical Science (MBio)
 - Year 3 of C1A3 Biomedical Science
 - Year 3 of C1B9 Biomedical Science

This module is Option list B for:

- UBSA-3 Undergraduate Biological Sciences
 - Year 3 of C105 Biological Sciences with Molecular Genetics
 - Year 3 of C107 Biological Sciences with Virology

This module is Option list C for:

- UBSA-3 Undergraduate Biological Sciences
 - Year 3 of C100 Biological Sciences
 - Year 3 of C100 Biological Sciences
 - Year 3 of C102 Biological Sciences with Cell Biology
 - Year 3 of C103 Biological Sciences with Environmental Resources
 - Year 3 of C104 Biological Sciences with Microbiology
 - Year 3 of C105 Biological Sciences with Molecular Genetics
 - Year 3 of C107 Biological Sciences with Virology
- UBSA-C1B9 Undergraduate Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
- Year 3 of ULFA-C1A3 Undergraduate Biomedical Science (MBio)