BS349-15 Science Communication

21/22

Department Life Sciences Level Undergraduate Level 3 Module leader Kevin Moffat Credit value 15 Module duration 10 weeks Assessment Multiple 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:

- Evaluate the effectiveness of communication in science
- Identify what makes science newsworthy
- Communicate scientific knowledge and ideas effectively and to a variety of audiences
- 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 (5%) |
| Seminars | 10 sessions of 1 hour (5%) |
| Private study | 130 hours (68%) |
| Assessment | 40 hours (21%) |
| Total | 190 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 | Eligible for self-certification |
|--|-----------|------------|---------------------------------|
| Video Video presentation | 50% | 20 hours | Yes (extension) |
| Essay/Coursework Written activities | 50% | 20 hours | Yes (extension) |

Assessment group R

| | Weighting | Study time | Eligible for self-certification |
|-------|-----------|------------|---------------------------------|
| Other | 100% | | No |

Feedback on assessment

Written feedback

Availability

Courses

This module is Core optional for:

• Year 3 of UIPA-C1L8 Undergraduate Life Sciences and Global Sustainable Development

This module is Optional for:

- Year 3 of UBSA-C700 Undergraduate Biochemistry
- ULFA-C1A2 Undergraduate Biochemistry (MBio)
 - Year 3 of C1A2 Biochemistry
 - Year 3 of C700 Biochemistry
- Year 4 of ULFA-C702 Undergraduate Biochemistry (with Placement Year)
- Year 3 of ULFA-C1A6 Undergraduate Biochemistry with Industrial Placement (MBio)
- Year 3 of UBSA-3 Undergraduate Biological Sciences
- Year 3 of ULFA-C1A1 Undergraduate Biological Sciences (MBio)
- Year 4 of ULFA-C113 Undergraduate Biological Sciences (with Placement Year)
- Year 3 of ULFA-C1A5 Undergraduate Biological Sciences with Industrial Placement (MBio)
- Year 3 of UBSA-C1B9 Undergraduate Biomedical Science
- ULFA-C1A3 Undergraduate Biomedical Science (MBio)
 - Year 3 of C1A3 Biomedical Science
 - Year 3 of C1B9 Biomedical Science
- Year 3 of ULFA-C1A7 Undergraduate Biomedical Science with Industrial Placement (MBio)
- Year 4 of ULFA-CB18 Undergraduate Biomedical Science with Placement Year
- Year 3 of ULFA-B140 Undergraduate Neuroscience (BSc)
- Year 3 of ULFA-B142 Undergraduate Neuroscience (MBio)
- Year 3 of ULFA-B143 Undergraduate Neuroscience (with Industrial Placement) (MBio)