PX376-15 Communicating Science

24/25

Department

Physics

Level

Undergraduate Level 3

Module leader

Michael Pounds

Credit value

15

Module duration

10 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

Employers look for many things in would-be employees. Sometimes they will be looking for specific knowledge, but often they will be interested in more general skills. One such skill is the ability to communicate effectively with an audience. This module will help to you develop your ability to present to, and interact with, audiences with different levels of understanding of the background science.

Module web page

Module aims

To provide experience in communicating scientific material to a variety of audiences

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.

You will analyse short articles in a number of scientific publications of different levels to see how the selection of material and style of writing has to be tailored to suit the intended audience. You

will be asked to prepare a number of communication pieces, including a summary sheet, a talk and a poster presentation. These will be assessed for the accuracy of the science, the appropriateness of the level of the presentation and how well you interact with your audiences. The module will also include some group working.

Information for the assignments will be readily available from journals, such as Scientific American, Physics Today and New Scientist, academic staff and the internet.

Learning outcomes

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

- Present scientific material to, and interact with, groups with different levels of understanding of the background science
- Give and receive peer-to-peer feedback

Indicative reading list

There are no specific scientific texts. Use will be made of material in standard undergraduate texts, articles in journals such as New Scientist, Physics World and Scientific American, and resources available on the internet.

For written English: D. Hacker, A Pocket Style Manual (3rd ed.), Bedford/St. Martin's

Interdisciplinary

Interdisciplinary studies almost always involve collaboration between people with different backgrounds. Everyone must be able to communicate with people who have other areas of expertise to their own. In this module, students present scientific ideas in ways appropriate to different audiences. They also develop their ability to listen to their audience and encourage the engagement of their audience with the issues involved.

Subject specific skills

Ability to explain results and ideas from science to different audiences

Transferable skills

Analytical, collaborative, communication, group working, organisational, self-study

Study

Study time

Type Required

Seminars 10 sessions of 2 hours (13%)

Private study 130 hours (87%)

Total 150 hours

Private study description

Wider reading on a range of scientific topics, discussing with others taking the module, drafting written work, listening to presentations by other students, preparing an oral presentation and poster

Costs

No further costs have been identified for this module.

Assessment

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

Assessment group A2

Weighting	Study time	Eligible for self-certification
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Assessment component

Coursework 100% No

Written work + presentations

Reassessment component

Coursework Reassessment No

As designated by the department - the module cannot be repeated

Feedback on assessment

Written and oral feedback from markers

Availability

Courses

This module is Core for:

- Year 3 of UPXA-GF13 Undergraduate Mathematics and Physics (BSc)
- Year 3 of UPXA-FG31 Undergraduate Mathematics and Physics (MMathPhys)
- Year 4 of UPXA-GF14 Undergraduate Mathematics and Physics (with Intercalated Year)
- Year 3 of UPXA-F300 Undergraduate Physics (BSc)
- Year 3 of UPXA-F303 Undergraduate Physics (MPhys)
- Year 4 of UPXA-F301 Undergraduate Physics (with Intercalated Year)
- Year 3 of UPXA-F3F5 Undergraduate Physics with Astrophysics (BSc)

This module is Optional for:

- UCHA-4M Undergraduate Master of Chemistry Variants
 - Year 3 of F126 MChem Chemistry with Med Chem (with Prof Exp)
 - Year 3 of F106 MChem Chemistry with Professional Experience

This module is Option list B for:

- UCHA-4 Undergraduate Chemistry (with Intercalated Year) Variants
 - Year 4 of F101 Chemistry (with Intercalated Year)
 - Year 4 of F122 Chemistry with Medicinal Chemistry (with Intercalated Year)
- UCHA-3 Undergraduate Chemistry 3 Year Variants
 - Year 3 of F100 Chemistry
 - Year 3 of F121 Chemistry with Medicinal Chemistry
- Year 3 of UCHA-F110 Undergraduate Master of Chemistry (with Industrial Placement)
- Year 4 of UCHA-F107 Undergraduate Master of Chemistry (with Intercalated Year)
- UCHA-F109 Undergraduate Master of Chemistry (with International Placement)
 - Year 3 of F109 MChem Chemistry (with International Placement)
 - Year 3 of F111 MChem Chemistry with Medicinal Chemistry (with International Placement)
- UCHA-4M Undergraduate Master of Chemistry Variants
 - Year 3 of F100 Chemistry
 - Year 3 of F105 Chemistry
 - Year 3 of F109 MChem Chemistry (with International Placement)
 - Year 3 of F125 MChem Chemistry with Medicinal Chemistry
- Year 4 of UCHA-F127 Undergraduate Master of Chemistry with Medicinal Chemistry (with Intercalated Year)