# Science Journalism

# (HPSC0107)

# Course Syllabus

2024-25 session | Scott Keir

A practical course in communicating science considering various genres of output for different audiences and on different platforms. Students learn how to write short news stories, profiles, and reportages for broadsheet newspapers and popular science magazines, targeting a range of audiences from educated adults to school children with an interest in science. They write different formats and produce other kind of contents for social media such as podcasts. They interview scientists on their work and present their interviews in writing as well as through podcasting. Issues in the public understanding of science are discussed from this practical standpoint of communication.

This module is time intensive and requires substantial group work. It rests on the idea that the only way to learn how to write is to write as much as possible. The assessment for the module is a mix of formative and summative assessment and assignments.

# Course Information

## Basic course information

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|---|---|
| Course website: | See Moodle |
| Moodle Web site: | Search “HPSC0107” |
| Assessment: | Coursework |
| Timetable: | See Portico |
| Prerequisites: | None |
| Required texts: | See reading list on Moodle |
| Course tutor: | Scott Keir |
| Office location: | 22 Gordon Square, room 2.3 |
| Office hours: | Thursdays, Noon – 1pm |

Teaching for this course takes the form of two-hour weekly seminars with a blend of discussion-led sessions and practical activities. The synoptic schedule (table below) provides you with an *indicative* list of the weekly themes for the discussion and for the practical activities. The reading list is indicative, for those willing to go deeper into the subject.

Note: The themes and order might be changed at short notice if deemed necessary by tutors. You will be notified via Moodle if this is the case.

## Asking questions about the course

Students are encouraged to use the Moodle forums to ask questions – especially as these may also be of assistance to other students. Visit the course tutor's office hours to discuss issues or ask questions about the course.

## Weekly editorial meetings

From week two, the session will begin with an editorial meeting that mimics what happens in professional newsrooms – everyone meets to quickly discuss what's happening, and what is worth covering. Likewise, students will be asked to discuss the science stories they've identified in the news during the week.

Students should note that UCL provides access to many news and magazine sources via the UCL Library. This includes a free subscription to the *Financial Times*, in which science journalism is of good standard. As people interested in journalism, students should get into the habit of reading quality newspapers daily, and consuming other quality science media.

# Aims & objectives

## Aims

The aim of the module is to introduce students to the basics of science journalism. The module will equip students with foundational skills to use different media and formats to effectively communicate scientific ideas. Through this practical approach, students will be invited to reflect on what is science communication, why it is done, what are the social and political roles of science communication.

## Objectives

By the end of the module, students should:

- know how to structure a piece of communication to achieve their aims;
- be able to write short informative texts, for blogs or more traditional news outlets;
- have a sense of what it takes to find good science news story;
- be aware of different ways of communicating scientific idea;
- be able to communicate scientific ideas through different media, using sound, image, or objects, as well as the written word;
- be familiar with the basic principles of interviewing;
- have planned and conducted a reportage;
- be able to coordinate different sources to write a feature piece;
- be aware of sociological issues pertaining to the communication of scientific knowledge.

# Teaching team

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|---|---|
| **Module Tutor** | Scott Keir |
| **Graduate Teaching Assistant** | Nabilah Hana Luthfiyah |

# Synoptic Schedule

| **Week (UCL week)** | **Date** | **Themes** | **Tutorials** |
|---|---|---|---|
| 1 (20) | 16.01.2025 | Introducing science journalism: what, where, how? | Critically looking at stories. Getting started writing. |
| 2 (21) | 23.01.2025 | The role and practice of science journalism – what can you write about and how? | Writing a news piece. Critical engagement with press releases. |
| 3 (22) | 30.01.2025 | Interviewing | Preparing and asking questions. |
| 4 (23) | 06.02.2025 | The medium of sound. | Creating audio. |
| 5 (24) | 13.02.2025 | Storytelling and researching stories. | How to construct a magazine. |
| 6 (25) | 20.02.2025 | Reading week | |
| 7 (26) | 27.02.2025 | Communicating scientific ideas visually. | Scripting and storyboarding. |
| 8 (27) | 06.03.2025 | Providing context and challenge. | Reverse engineering a reportage; Pitching a story to an editor. |
| 9 (28) | 13.03.2025 | Assessment: group project presentations and discussions | |
| 10 (29) | 20.03.2025 | The practice of journalism | Career and entrepreneurship: Miriam Frankel, New Scientist |
| 11 (30) | 27.03.2025 | tbc | Science Journalism and PR: Ed Day, SMC |

# Assessments

## Summary

Assessment for this module is meant to enable you to produce two items for your portfolio, to demonstrate your journalistic abilities, with these three deadlines:

| | Description | Deadline | Word limit | Weight |
|---|---|---|---|---|
| **CW** | Mini-Magazine – project description | 29 January 2025, 5.00pm | See below | 0 |
| **CW** | 3' Newscast | 24 February 2025, 5:00pm | N/A | 40.0 |
| **CW** | Mini-Magazine | 28 March 2025, 5:00pm | 2,500 | 60.0 |

**Please note:**

- All deadlines for submission are at 5:00pm UK local time
- The two pieces of coursework will constitute your 3,000-word portfolio.
- You are advised to **start working early** on the mini-magazine as it will take time. Your research work for the mini-magazine should feed naturally into the production of the podcast. See guidance below.

## Coursework 1: 3' Newscast

**Submission date: 24 February 2025, 5:00 PM**

For this assignment, working on your own, you will produce a 3 (three)-minute radio news segment about a recent piece of research conducted at UCL. To produce this newscast, you will need to identify a recent press release from the UCL press office and work from there. Your newscast must feature a short interview segment with a scientist.

**Please note:**

Together with the podcast (a sound file) you are required to upload a short note (pdf, Word document) on Moodle, containing:

1. the topic of the podcast and a brief summary (80 words) of the content;
2. the name of the UCL researcher interviewed for the podcast as well as their lab, and/or department;
3. the credits for the podcast, including any sound (sound effect, background music...) used.
4. either a statement that AI technologies were not used, or a description of how AI technologies were used (see below for more detail)

**Assessment Criteria for the Newscast:**

Your work will be assessed against the following criteria:

1. Science communication value:
   Is the podcast dealing with a science communication topic, i.e. is it an assignment relevant to a science communication course? (E.g.: Is it about research, or scientific practice, or the impact of science on citizens and society, or about a science education project….)

2. Effective use of the medium (Sound):
   Is the medium used effectively, e.g. to create a sense of place, to elicit images in listeners' mind, to create an atmosphere. Is the sound quality consistently good throughout? Is editing clean (e.g. no blanks, no word cut short, etc.)

3. Structure:
   Is there an introduction, clearly identified segments and a conclusion. Is the essential message coming through clearly at the beginning? Is it clear what the newscast is about?

4. News Value:
   Is there news value in this newscast? Is it topical? Will people want to know more about what the newscast is about? How relatable is it? Etc.

5. Information value:
   Are scientific ideas presented in a creative, yet clear and accessible way? Do we learn something new listening to the newscast?

6. Listening value:
   Is the segment pleasant to listen to, surprising, thought provoking, intriguing?

7. Length:
   Is the Newscast three minutes (180 seconds) long?

8. Intellectual property:
   Have issues of copyright been properly considered and all the sounds appropriately credited? (Do not omit any credits – e.g. for public domain sounds, do state that these are public domain).

## Coursework 2: Mini-Magazine

**Submission date for mini-magazine project description (formative): 29 January 2025, 5.00pm**

**Submission date for final product (summative): 28 March 2025, 5:00pm**

For this assignment you will work in a group. Together, you will produce a mini-magazine. Your mini-magazine should contain different types of content: briefs, long reads, profiles, medium format, photo-reportage, even games if you want to. Each group member will be expected to produce different pieces of writing for the magazine, and to sign them.

This varied content should enable you to cover a topic, related to research conducted at UCL. Don't forget that it all needs to be newsworthy, topical, and attractive.

The word limit for your mini-magazine will be determined by the number of people in the group. As a guide, each member will have to contribute up to **2,500 words worth of material and a specific set of formats:**

- **2 pieces @ 50 words**
- **4 pieces @ 100 words**
- **2 pieces @ 500 words (one of which interview-based)**
- **1 feature @ 1,000 words**

The word count for each piece includes headlines and captions.

Note that in addition, each group member is expected to contribute equal time and effort to the overall management and production of the magazine, including coordination, idea generation, fact checking, copy editing, editing, layout etc.

**Please note:** Together with the mini-magazine you are required to upload a document on Moodle, in which each member of the group answers following questions (200 words per group member):

1. What was your contribution towards the group's Mini-Magazine?
2. What did you learn in the process of the group work (about yourself)?
3. Where and how were AI technologies used, if applicable? Provide either a statement that you did not use tools driven by artificial intelligence (such as LLMs), or a description of where and how these AI technologies were used.

**Working in a group**

Groups will be decided by course tutors randomly but including criteria that results in an evenly distributed mix of diverse experience and background, to ensure the best learning outcomes.

Within your group you will need to attribute roles. As a minimum, you will need

- editor, who will be in charge of coordinating the project
- graphic designer to lead on the visual aspect of the project
- copy editor, who checks all the texts for typos, spelling, grammar

All these roles can be assumed collectively but it helps to have clearly defined roles and responsibilities. This does not mean that they must take all the decisions and do all the work on their own, they rather keep track of the process, and make sure the necessary work gets done (e.g. it will be helpful for you to share the task of copy editing as much as possible so you can all experience its importance).

Note that misalignments and misunderstandings can and do happen in group-work, that is totally normal. Your experiences from this group work will allow you to respond in a better and more productive way when doing this work professionally in the future. The teaching team will do their best to support your learning. If for some reason, a student finds themselves unable to work with a group to produce a magazine, they should consult the course tutor. If no solution can be found the tutor can exceptionally assign an alternative assessment with the same deadline.

**First Step: Producing a project description**

Your first task as a group will be to create a **project description for your mini-magazine**. You will need to come up with a concept, a topic, a list of rubrics (or at least a sense of the architecture of the magazine, how will you present the content, which formats will you use, etc.?), and a tentative table of content.

The project description will contain a brief (200-300 words) description of the overarching topic, its relevance and timeliness. You will need to emphasise its newsworthiness, what makes it worth writing about it now? You will need to indicate what is your target readership (e.g. children, teenagers, young adults, affluent middle class educated, or excluded groups, elderly people, pet lovers, vegans, LGBTQI+…).

You will then need to sketch out your approach to the topic: What kind of contents will you produce? Consider that some contents are only justified by their news value (briefs), but others' purpose is to provide context and background information, or broaden the perspective (longer formats, features).

You will then provide an outline of the structure of your magazine, with planned rubrics and key pieces. Ideally each rubric should vary in the type of content and provide a specific entry point in the magazine.

Overall, this project description should fit on 2 A4 pages, 3 at most.

It will not be graded, but you will receive formative feedback on it, and you as a group will be invited to come and discuss it with a member of the teaching team.

*Submit for formative feedback by **29 January 2025***

**Second Step: Producing the magazine.**

Once you are set on your project, you will need to actually produce the magazine.

You will need to agree on deadlines and set up a timeline within the group (when texts are to be delivered in order to allow for copy-editing and adjustments, for a first draft of the complete magazine to be assembled, etc.). Regular editorial meetings (once a week is a good regularity) will be necessary for you to keep track of how everyone is progressing and decide on the different practical aspects of the production.

*Submission date for this assignment is **28 March 2025***

**Assessment Criteria for the mini-magazine**

Your mini-magazine will be assessed against the following criteria:

1. Structure:
   Does the magazine provide a clear structure/architecture that guides the reader through its content in a comprehensive and inviting manner? Do the different parts interact well (e.g. does the cover-page give an inviting sneak peak of the content, does the table of content offer a good overview of the rubrics/topics)? Do the article titles fit with the overarching theme and style of the magazine?

2. News value:
   Does the content of the magazine contain newsworthy contributions? For example: Does it affect people's lives (impact and meaningfulness), is the insight or information

novel (timeliness), is it about someone important or a prominent actor, is it unexpected, reporting on a conflict, or bring in a new and/or interesting take/perspective?

3. Information value:
   Is the information gathered from trustworthy sources and verified? Does the reporting show a healthy scepticism towards information used to back up the claims made? Have power and purpose of the sources consulted, and possible inherent bias of the information been considered (e.g. conflicts of interest)? Are relevant sources cited/mentioned transparently and adequately?

4. Journalistic content:
   Are the stories well-written? Does the content provide evidence of legwork? Does the work show an awareness of rights and responsibilities concerning the value of information (incl. copyright and fair use)? Is the reporting accurate and fair in conveying a diversity of perspectives to their audiences (e.g. a variety of voices in the pieces to cover the different sides of a story)?

5. Variety of sources:
   Is the information used to make arguments from a variety of sources and in a variety of forms?

6. Effective use of source material:
   Is the source material presented and used to make claims in a clear and engaging manner?

7. Copy editing:
   Have the texts been checked to ensure no language or typing errors remain, and layout and typographical standards are met? (e.g. facts, dates, and name checking; grammar, spelling and punctuation are correct; titles and subtitles, captions correct and aligned with overarching style).

8. Something extra
   Something that lifts it up beyond the everyday (for example, good use of images, gripping stories, etc.)

## Use of AI in your assessments

In this assessment we are interested in original journalistic contribution and training the necessary skills for this. Any use of AI tools that generate or manipulate text – whether ChatGPT, Bing, Copilot, Gemini, Grammarly or any other brand – is entirely optional but discouraged. As STS scholars we critically reflect on these technologies as we do with any other. If you choose to use any AI technologies in class or in your assessments, particularly generative AI tools, we require that these be used thoughtfully, ethically, and transparently.

In keeping with UCL Category 2 for GenAI use in assessment, students are permitted to use AI tools for:

- Drafting ideas and planning or structuring written materials
- Reviewing and critically analysing written materials to assess their validity
- Helping to improve your grammar and writing structure – especially helpful if English is a second language

- Experimenting with different writing styles
- Getting explanations

Students are not permitted to use AI tools for:

- Writing parts of the submission (e.g., more than a few sentences).

Any use of AI must be made transparent (see additional notes to be handed in with the coursework). Students must correctly document any use of AI tools so that it can be appropriately acknowledged. Please be aware that you are responsible for ensuring that the assessment that you submit correctly references the use of other people's ideas and work. For further information on using AI in your assessments, please visit UCL guides for assessment success: https://www.ucl.ac.uk/students/exams-and-assessments/assessment-success-guide/engaging-generative-ai-your-education-and-assessment

If you submit AI-generated text that has used the work of human authors and it is not appropriately referenced, this may count as academic misconduct. Please see the library's guidance, here: https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-AI

# Reading list

Students are encouraged to consume and critically reflect on contemporary science journalism throughout the course, and to keep up-to-date with current discussions on science journalism. UCL Library provides access to many news and current affairs sources.

In addition, we will suggest specific items from the reading list available on Moodle.