Imperial College London

Student Handbook

MSc Science Communication
MSc Science Media Production

2024-2025

Welcome to the Science Communication Unit at Imperial College. We very much hope you enjoy your time with us.

This booklet contains the general information you will need to follow the MSc Science Communication and the MSc Science Media Production. More detailed information about individual modules will also be given out as the year proceeds. You can also find information about the courses on our website at www.imperial.ac.uk/science-communication-unit and on the Blackboard learning portal at bb.imperial.ac.uk.

Please keep this booklet to hand throughout the year. If you have any questions about the course, please don't hesitate to ask one of the course tutors. Our contact details are at the back of this booklet.

Contents

Introduction

The MSc in Science Communication and MSc in Science Media Production are twelve-month Master's degrees aimed at preparing science graduates for careers in the media and other communication professions. The MSc in Science Communication offers a broad overview suitable for those interested in all aspects of communication. The MSc in Science Media Production is focussed specifically on broadcast media and has a greater emphasis on broadcast production work, especially over the summer period.

Both courses combine academic analysis with creative media work. There can be tensions between these two ways of thinking and working (and some people may find they are much better at one than the other) but both are essential to becoming a good science communicator. With time, you will begin to see how the practical work and academic work can each inform the other.

The academic side of the programme draws heavily on the humanities and social sciences. As a large majority of our students are trained as scientists, we do not expect you to have any prior knowledge of these areas, but you will find that you cover a lot of new material at a rapid pace. You may find this disorienting at times – and you will certainly find it hard work – but we can guarantee that you will also find it a highly rewarding experience. We also do not assume any inside knowledge of the media, although we do assume that all students are consumers of the media and have a general knowledge of a range of outlets and genres.

The courses are taught by five members of staff together with a number of freelancers who work in the industry or in academia. We will be happy to answer any questions you may have at any time over the course of the year. You will often find that you can catch lecturers at the end of a class, but for more extensive questions it is best to e-mail to make an appointment (see the end of the booklet for contact details of the five staff members). Specific administrative questions should be addressed either to our administrator Liam Watson or to the relevant course leader (Kanta Dihal, Science Communication; Robert Sternberg, Science Media Production).

Starting at Imperial

In order to help ease you into the course, there will be an induction programme in the first week of term. The induction programme has two purposes:

- to enable you to get to know each other as quickly as possible;
- to introduce aspects of the learning techniques we shall be using on the course, some of which may be unfamiliar to those of you who to date have studied only science or engineering.

The induction programme will include discussion sessions and activities. We will also deal with various administrative matters during the induction.

Please ensure that:

- you have registered with Imperial College before the start of induction week. You will receive a College e-mail account when you register.
- during induction week you collect your College ID card from Liam Watson. These cards double as security passes and library cards. You will need them for access to College buildings after normal working hours and for entry to the library at any time.

University information

Details of Imperial College facilities and other information may be found on the College website: www.imperial.ac.uk/students.

A copy of the Regulations for Students can be found at: www.imperial.ac.uk/about/governance/academic-governance/regulations/.

All postgraduate students are members of Imperial College's Early Career Researcher Institute. The ECRI provides training courses and

workshops, including on public speaking and reference management. They have a monthly newsletter you can subscribe to for updates about their training. For details see: https://www.imperial.ac.uk/students/academic-support/graduate-school/.

The Centre for Languages, Culture and Communication, of which the Science Communication Unit is a part, offers a range of evening classes in languages, the arts, and humanities. These are available to our students at a discounted rate. You can sign up for them at https://www.imperial.ac.uk/evening-classes/.

Support for students

Lecturers are happy to respond to queries about their modules outside class time. It is usually best to email to make an appointment or to catch them at the end of a class.

You will be assigned a personal tutor. Your tutor, one of the lecturers, will meet with you towards the end of the first term to discuss your progress so far and to talk about how you are finding the course. Your personal tutor will also be available at other times to discuss any personal problems you may have – just email them to make an appointment. You are also welcome to make an appointment with your course leader or with the Director of the Science Communication Unit, Felicity Mellor, to discuss any personal difficulties you may be facing or any issues about the course in general.

Liam Watson is the Science Communication Unit's Student Wellbeing Advisor and Disability Liaison Officer. He and Kanta Dihal are both trained in mental health and physical first aid.

The College also provides a counselling service. Counsellors are available to any student who would like to talk confidentially about any personal issue, such as study difficulties, loneliness, anxiety, depression, relationship issues, bereavement, or sexuality. You can request a male or a female counsellor. Telephone 020 7594 9637 or email counselling@imperial.ac.uk to arrange an appointment.

Information for international students

Imperial College is home to students from over 140 countries and has a wide range of support available on topics including visas, accommodation, scholarships, and English language skills: https://www.imperial.ac.uk/study/international-students/.

About half of the students on the two MScs tend to come from outside the UK. Bear in mind, however, that this is a UK-based degree: if you are not already familiar with the UK media, make

some time early on, preferably before the start of the first term, to explore the UK media landscape.

English language support

Living and working in an English-speaking country can be a challenge if you have never done so before. Imperial College's Centre for Academic English offers different kinds of language support, both as pre-sessional courses (before you start your degree) and throughout the academic year, specifically made for Master's students. You can find more information here: https://www.imperial.ac.uk/academic-english/current-students/master's/.

Work placements for overseas students

If you are studying on a student visa (formerly 'Tier 4'), your visa allows you to do your work placement full time and to be paid (if remuneration is offered). The work placement is an assessed component of your course and is integral to your learning, hence you are compliant with the conditions of your visa. However, you *must complete* your end-of-placement written assignment for it to comply with visa conditions. We will send you relevant details closer to the time. The assignment does not count towards your final mark, but it is nonetheless an assessment.

You may be offered other work experience during the course. The general rule is that if we have helped you arrange the work placement, it is counted as part of your course. But be aware of taking up work outside offerings from the course as this could potentially infringe your visa rights. You must not take up any work as a 'freelancer'. Unless you are paid through a 'payroll' or employed as a 'casual worker', you are likely to be violating the terms of your visa. If you are in doubt, check with the International Student Support office: https://www.imperial.ac.uk/students/international-students/.

Information for students with disabilities, specific learning difficulties or long-term health issues

We recognise that studying at university can be a challenge, especially if you have a disability. We are keen that you have every opportunity to fulfil your potential and graduate with the degree you deserve. It is therefore important that you let us know about any disability, specific learning difficulty, or health problem as soon as possible so that we can give expert advice and support to enable you to do this. Imperial College's Disability Advisory Service experiences its busiest period at the start of each academic year, so it is vital to get in touch early to make sure the support you need is set up as early as possible.

Even if you may not consider yourself as having a disability, students who have experienced any of the issues listed below have found that a little extra help and support has made all the difference to their study experience.

- Specific learning difficulties (such as dyslexia, dyspraxia, ADHD)
- Autism spectrum disorder (including the former diagnosis of Asperger's)
- Deafness or hearing difficulties
- Long term mental health difficulties (such as chronic anxiety, bipolar disorder, depression)
- Medical conditions (such as epilepsy, arthritis, diabetes, Crohn's disease)
- Physical disabilities or mobility impairments
- Visual difficulties

Where to find help

1. Your Disability Liaison Officer

Liam Watson, our Disability Liaison Officer, is your first point of contact and is there to help you with arranging any support within the Science Communication Unit that you need.

2. Disability Advisory Service

www.imperial.ac.uk/disabilityadvisoryservice

The Disability Advisory Service works with individual students no matter what their disability to ensure that they have the support they need. They can also help if you think that you may have an undiagnosed learning difficulty such as dyslexia. The service is both confidential (information about you is only passed on to other people in the university with your agreement) and individual (any support is tailored to what you need).

Some of the things the Disability Advisory Service can help with are:

- Being an advocate on your behalf with others at Imperial College such as your departmental liaison officer, senior tutor or exams officer, the accommodation office, or the estates department.
- Checking that your evidence of disability is appropriate and up to date.
- Arranging a diagnostic assessment for specific learning difficulties.
- Help with applying to the College for covering the cost of an assessment.
- Help with your application for the Disabled Students' Allowance (DSA) (see below).
- Helping students not eligible for the Disabled Students' Allowance in obtaining support from other sources.
- Help with arranging extra library support.

Disabled Students' Allowance

Students who have a 'home' fees classification and who have a disability can apply for a grant called the Disabled Students' Allowance (DSA) which can cover any extra costs that are a direct result of disability. This fund is not means-tested and is a grant, not a loan, so any home student with a disability can apply and will not be expected to pay it back. Students with invisible disabilities such as mental health difficulties, specific learning difficulties such as dyslexia, or long-term health problems are also eligible for this fund. For more information see: www.imperial.ac.uk/disability-advisory-service/.

Our approach to learning

Reflective learning

Many of you will think of your time at university so far as having involved long days in class, combining passive learning in large lecture theatres with lab sessions. We, however, emphasise the need for students to take an active approach to learning – working through ideas for yourself so that you really come to understand the issues at stake. This means, on the one hand, that we do not simply lecture: our teaching is done in seminars that involve active participation and discussion. On the other hand, this course resembles most humanities and social science subjects in that there will be far less class time than you may be used to, and far more private study time to give you a chance to do the large amounts of reading that you will need to do. Some students can find this a little unnerving at first, but learning to learn independently is one of the most important skills you will acquire during your time here.

Educational research shows that learning is more effective whenever learners are conscious of how learning is taking place, an approach known as ‘reflective learning’. By taking a step back, you will be better able to make connections between ideas and topics. The research shows that this is best done in company: by sharing your reflections with others. This is part of what our seminars and group work aim to achieve.

Remote teaching

All seminars will be taught in person; they will not be livestreamed or recorded, to allow students to feel more comfortable participating in discussions. By mutual agreement, you can arrange for dissertation supervisions, adviser check-ins, and other one-on-one meetings to take place remotely. Some lecturers will also arrange online essay workshops during the term.

We normally use Zoom as the platform for any online sessions. Zoom became our preferred platform due to the pandemic because of its ease of use and functionality. Imperial College also uses Teams: if you prefer, you can use this for your own group work meetings. Teams is less intuitive to use and is less good with large groups, but it has the advantage of being integrated with the College email system.

We are not otherwise expecting to have any elements of remote teaching during the upcoming academic year. Should restrictions be re-imposed due to the coronavirus or another pandemic, we may have to introduce some remote teaching. If this is the case, we will prioritise the delivery of practical work on campus.

Active reading

Taught classes are just a small part of the learning process. Whenever we want you to learn new ideas, we will encourage you to read about them, rather than tell you about them in lectures or seminars. Research shows that reading is a more effective way of learning than listening. We shall provide you with lots of written material composed specially for the course, together with copies of core texts from published sources. There will also be references to other books and articles which you can read to develop your understanding further.

This means that you will be required to do large amounts of reading every week for all academic modules. At the very least, you should read the course handouts and the other core texts provided as learning material in eachweek. Reading will be one of your most powerful learning activities, but reading is not much use unless it is *active* reading. You should engage with the text as you read it. Such engagement might take a number of forms and the one(s) you choose should be those most suited to your personality and learning style. They might include:

- Verbally responding to the text, especially if it annoys you or you can’t understand it (obviously best done in private!)

- Noting your responses by writing comments in the margins of the text (but clearly not in library books).

- Marking the text by underlining, highlighting and so on, to draw out the passages which are most interesting or important (again, not in library books).

- Re-expressing what you have just read as an account or critique in your own words.

- For those with good memories (lucky people!), simply recording a few key points or words may prove adequate to recall much of the rest of the text.

It will be helpful for you to generate your own summary of core texts, for example ones that you might want to refer or respond to in essays, particularly if you struggle with them initially.

Learning from peers

Our teaching sessions involve student activities and group discussions as well as some more conventional seminar-style teaching. The point of these activities is to play around with new ideas, to discuss them, and begin to fit them into the framework of what you already know.

In all cases, the best learning will occur if you both contribute to the session and listen to and learn from what other people say. It doesn't matter if you agree or disagree with them – interacting with these different ideas will lead to the development and maturation of your own ideas. In these situations, you are learning from your peer group, and since members of that group have very different backgrounds, interests and experiences, you all have a great deal to teach each other and a great deal to learn from each other.

Don't confine your discussions to class sessions. Discuss, argue, defend, attack, and pick each other's brains whenever you can. Share ideas, don't keep them to yourself. Everyone benefits from

exposing as many of their bright ideas as possible. Within the confines of the MSc courses you have nothing to lose. Try not to treat your fellow students as rivals but rather as partners and colleagues. Collectively you will get through this intellectual and practical assault course more easily than if you try to go it alone. Your objective should be to maximise the amount you learn.

Learning from assignments

You should view assignments as a great learning opportunity; that they are also a means of assessment is a secondary function. There will be a large number of assignments, for both the academic and practical modules. These will all be open-ended exercises, with no right or wrong answers, and will provide opportunities for reflection and development.

Assignments for the academic modules will usually take the form of essays, and the most appropriate structure for them will vary considerably. However, the following general features are relevant to all the essays you will be set.

- The questions will seldom have agreed right answers and cannot be resolved merely by recourse to more information or more facts. The facts themselves need extensive interpretation.

- In many cases the titles or themes of the assignments will not be in the form of a tight question or a solvable problem. Re-expressing the title in such a context, framing an interesting question, may be important. However, you must always ensure that your essay does directly address the question posed, or undertakes the task set, in the assignment brief.

- Most scientists have been trained, when faced with a question to which there is no agreed answer, to generate a review, an even-handed summary of all sides of the question with perhaps an appeal for more thought or experiment to resolve the issue. But for most of the questions we ask, such a review and call for more work is not appropriate. Instead, you will have to develop an

argument about some aspect of the question, usually to support a particular interpretation of the issue.

A good academic argument has the following characteristics:

- Its steps are logically founded and developed. Recourse to emotional argument is usually avoided.

- Factual information and other evidence is selected and presented in service of the argument. Don't include facts and concepts gratuitously because you happen to know them or have just learned them.

- All information is accurate and correctly attributed.

- Interpretations and arguments against your own position are competently rebutted (as far as this is possible, since if they could be completely rebutted then the question would have a right answer).

- The introduction clearly states the thesis that is to be presented in the rest of the essay.

- The argument is well structured, with clear conclusions.

- The discussion is elegant, stylish and concise.

- The essay is presented in grammatically correct English, with few (ideally no!) typos.

These are some of the key criteria we shall be looking for in assessing many of the academic assignments you undertake. The whole thing may look and feel strange to someone who has not done much essay writing and to those who have only written essays whose main objective is to demonstrate accurate recall and understanding of textbook science. Don't worry, practice will soon make perfect. It does not take long to learn how to do these things.

For details of the marking criteria, see the section on assessment.

Using AI

'Generative AI' is one of the terms used for technology that is able to generate media including text, images, audio, and even videos. The use of generative AI in university became a talking point almost overnight upon the release of ChatGPT in December 2022, a system which is capable of writing texts of up to 600 words.

Guidelines around the use of generative AI in academic assignments are in flux, and Imperial College regularly updates its regulations. The current regulations can be found on the Library website at https://www.imperial.ac.uk/admin-services/library/learning-support/generative-ai-guidance/. They are brief, but encompass the most important points you should bear in mind:

- You can use AI to help you brainstorm ideas, ask for explanations of complex concepts, or check the quality of your written work (this can be particularly helpful if you have a specific learning disorder or if your English is not fluent).
- If you have used generative AI tools for your assessed work (including for brainstorming), you should include a statement to acknowledge this use. You can find a sample statement on the Library website at the link above.
- All current AI systems have significant limitations. They are known for producing text that is unnecessarily wordy, repetitive, or even entirely made up. Never assume that a reference given to you by an AI system is real: always check sources yourself.
- Never submit anything that was generated by AI as your own work. This is considered plagiarism, a form of academic misconduct the College takes very seriously. In the context of our degrees, this applies to AI-generated images, audio, and video as well as to any written work you submit for assessment.
- As with any other source, if you want to refer to any outputs generated by AI in your work, you should include a citation. See the section 'How to reference properly' below for more information.

Study guides

If you come to this course from a science background, you might find it helpful to read more about learning and writing in a humanities context. Among the relevant study guides available in the library are:

Biggam, J. (2021) *Succeeding with your Master's Dissertation: A Step-by-step Handbook*. 5th ed. Milton Keynes: Open University Press.

Cottrell, S. (2023) *Critical Thinking Skils: Effective Analysis, Argument and Reflection.* 4th ed. London: Bloomsbury Academic.

Hughes, W. (2014) *Critical Thinking: An Introduction to the Basic Skills.* 7th ed. Peterborough, ON: Broadview Press.

Katz, L. (2018) *Critical Thinking and Persuasive Writing for Postgraduates.* London: Bloomsbury Academic.

Warburton, N. (2007) *Thinking from A to Z*. 3rd ed. London: Routledge.

Extracurricular science communication activities

We encourage students to take on voluntary activities on the side if you can. For instance, there are opportunities to work on the Imperial College newspaper *Felix*, the science magazine *I Science*, and the Imperial TV and radio stations. Other opportunities may also arise over the course of the year. These activities can be complementary to the work you will be doing on the courses and you may find there is mutual feedback between such activities and the master's programme; however, you must ensure that you do not take on so much that it leaves you with too little time for your studies.

When you take on extracurricular commitments, bear in mind that in the first term in particular you should be spending a lot of time reading. Most students also find that the course occupies more and more of their time as the year progresses.

Course Content
MSc Science Communication

The MSc Science Communication consists of a combination of academic and practical modules designed to encourage you to reflect on issues concerning science communication while developing your own communication skills in a range of media. The precise balance between academic and practical work shifts over the course of the year, with the taught academic modules scheduled for the first half of the year and practical work predominating in the second half of the year. During the second half of the year, you will also write a dissertation, and over the summer full-time students will undertake a work placement.

Timetable

Having more time for independent study means that your timetable will not look like that of the average science student. During the Autumn Term, your teaching will mostly take place on Mondays and Tuesdays only. During the Spring Term, your schedule will depend on your optional modules (see below), but again nearly all the teaching will take place on Mondays and Tuesdays. Only in the Summer Term will there be modules taught on every day of the week: on which days you will have to be in class will depend on your module choices.

In addition to classes, there is a weekly seminar series on Tuesday afternoons during the first two terms. Visiting speakers give talks on topics of general interest to students on both courses. The speakers are alumni, media practitioners, or academics in relevant fields. Attendance at seminars is compulsory. Part-time students may choose to attend in either your first or second year, or come along in both years if you want!

Term 1

Core Academic Module 1: Science and its Social Contexts
Core Academic Module 2: Media Representation of Science
Core Practical

In this term, full-time students take two core academic modules and one core practical module. Part-time students take the Core Practical and Core Module 1 in their first year and Core Module 2 in their second year.

The aim of the two core academic modules in this term is to get you to think critically about the nature of science, the nature of the media, and the interaction between the two. To do this, you need to stop thinking like a scientist (although inside knowledge of science will continue to be useful to you) and to start seeing science from the outside. To help you in this, we draw on analyses from a range of disciplines including history, sociology, cultural and media studies, and philosophy.

The Core Practical gives you the chance to explore how some of the ideas you encounter in the academic modules influence communication practice. You will get hands-on with our audio and video equipment from the first day, taking on a variety of roles and thinking hard about audiences. Following our 'reflective learning' approach, you will try ideas out in small groups and reflect on them. In some weeks, the whole class will get together to share work. Discussion about what you have learned is at the heart of the encounter. So that you can feel unpressured trying out new skills, the work you do in the core practical is not formally assessed.

Term 2

Group project
Introduction to the Dissertation

Academic option modules chosen from:
Science and Fiction
Documentary Film

Narrative
Science Communication and Global Justice
Museums, Heritage and Science
Science Policy
Sounds, Signs and Meanings in Radio

The options are 'half-modules', meaning that each module lasts for five weeks with an assessment at the end.

In this term, full-time students will complete the Group Project and choose three of the options. Part-time students normally take two option modules in their first year and the Group Project and the remaining option in their second year.

Details of the option modules will be given out towards the end of the first term, and you will be asked to make your choice shortly afterwards. The option modules give you the opportunity to further develop some of the ideas from the core academic modules by pursuing more specialist areas. These modules look at specific issues in greater depth than the core modules do and typically draw on just one or two academic disciplines.

The aim of the Group Project is to give you an opportunity to revisit some of the ideas you encountered in the core academic modules and to explore how these might inform a piece of creative work in a more practical context. You will work in a small group to produce an artwork or some other form of audio or visual product. This module is all about imagination, abstract ideas, and actual products.

This term you will also start the process of developing your dissertation project ideas. There will be three workshops during the term to help you with this.

Term 3

Dissertation
Optional: *Ethics* (not assessed)

Practical option modules chosen from:
Digital Media Campaigning

Radio
Exhibitions
TV
Writing for Journalism

Over the Easter vacation, full-time students will make a start on their dissertations. You will continue with this work during the summer term, as well as taking two practical modules from those listed above. Part-time students take one practical option each year and undertake the dissertation in the second year.

An introductory session about all the practical options will be held towards the end of the second term when you will be asked to make your choice. Please note that all practical options have a limited number of places. We will ask you to indicate your top three preferences. We cannot guarantee that you will be able to do both your top two choices, although in most cases this is possible.

You will also be able to attend three optional seminars on ethics this term. These will first introduce key ethics concepts, and then go into science ethics and practical applications, including the ethics of your own dissertation research.

Dissertations

The dissertation is a substantial piece of academic research which involves investigative work and demonstrates critical engagement with the relevant literature. During the second term you will put together a project proposal and you will be allocated a member of the teaching staff to supervise your work. The choice of subject is yours, but it must be demonstrably related to science communication.

At the start of the third term you will submit a literature review and research plan. You will continue to work on the dissertation during this term and you will have regular meetings with your supervisor to discuss your progress. You will complete the work over the summer. It is important that you make an early start on the dissertation since all dissertations need to be based on extensive reading. The precise

structure of the dissertation will vary, but all dissertations should present a well-evidenced argument or investigation.

Part-time students undertake their dissertations in the second year.

Work placements

During the summer, most students undertake a work placement of two to six weeks. We offer placements in a wide range of science communication roles and sectors including written journalism, broadcast media, museums and exhibitions, policy, and comms/PR. The placement is intended to complement the academic and practical elements of the MSc through some 'real world' experience. Some students, especially part-timers, may already be in relevant employment and thus not wish to take up a work placement, but we are happy to help any part-time students who would like one. We encourage all host institutions to consider some modest remuneration or at least to cover some subsistence and travel expenses, but the majority of work placements are unpaid.

You will be required to prepare a short report about your work placement, to be submitted by the end of the academic year. Submission of this report is compulsory as part of your MSc, but it does not count towards your final mark.

In many cases we arrange your placement through an ongoing relationship with the host organisations. Increasingly, our placement hosts require students to apply formally via the organisations' own work experience and volunteering schemes. We endeavour to provide a placement for everyone, but students are welcome to arrange their own internships instead.

The exact list of placements changes each year but some of our regular host organisations include: *The Observer*, BBC Science Unit (television), BBC Radio, Open Data Institute, Botanic Gardens Conservation International, Institute of Biomedical Science, April6 comms, Science Museum, British Science Festival, Sea Life Aquarium, a range of television production companies, several positions at Imperial College, Academy of Medical Sciences,

Scientific Committee on Antarctic Research, AstraZeneca, and the Institute of Cancer Research. Most placements are UK-based (mainly in London) but in some years we also have one or two international internships; in recent years these have included CERN (Geneva) and *Science* magazine (remote).

The work placements are coordinated by Gareth Mitchell. During the spring term Gareth will ask you to indicate what sort of placement you would prefer and to submit a copy of a well-composed CV. Actual allocation of placements can happen at short notice and at any time over the summer. Some years, we are able to offer a second placement, but only when everybody who wants one has a first placement.

See the Careers section for advice on preparing for work placements.

Course Content
MSc Science Media Production

The MSc Science Media Production (SMP) combines academic and practical modules to introduce students to key issues in communication with an emphasis on broadcast media. You will be encouraged to reflect on the nature of the media and to draw on theories of communication to inform your own practical work. The balance between academic and practical work varies during the year. In the first half of the year, taught academic modules sit alongside more practical work, while in the second, you will focus solely on practical projects. This second half begins with a work placement in May and is followed, from June to September, by preparation and completion of a substantial film or radio project.

Timetable

Having more time for independent study means that your timetable will not look like that of the average science student. During the Autumn and Spring Terms, nearly all of your teaching will take place on Tuesdays and Thursdays, although you will often find yourself in the Science Communication Unit on other days to use the facilities for the practical projects.

In addition to classes, there is a weekly seminar series on Tuesday afternoons during the first two terms. Visiting speakers give talks on topics of general interest to students on both courses. The speakers are alumni, media practitioners, or academics in relevant fields. Attendance at seminars is compulsory.

Term 1

In this term you will take two academic modules and one practical project.

Academic module 1: Science and its Social Contexts

Academic module 2: Introduction to Film Form
Radio Production

Science and its Social Contexts is shared with the Science Communication students while Introduction to Film Form and Radio Production are for SMP students only.

The academic modules will help you to think critically about the nature of science and its relationship with wider society, and about the nature of film and the development of distinctive film styles. You will encounter ideas from a range of disciplines including the philosophy of science, the sociology of science, and film theory.

Radio Production will introduce you to the fundamentals of journalistic practice and make you proficient in essential aspects of radio production. During the term you will systematically explore techniques of writing and narrating for radio and interview technique; you will then produce short features and complete programmes. You will be assessed on the individual production of a radio package, and you will also work in groups on the live transmission of our 'Science at One' weekly magazine programme.

In the last three weeks of term there will be three workshops introducing you to the basic techniques of documentary film production in preparation for your second term practical project.

Term 2

During this term you will take three theory half-modules and one practical project:

Narrative
Documentary Film
Sounds, Signs and Meaning in Radio
Documentary Production

The theory modules are five weeks long with an assessment at the end. Their aim is to look at some ideas in greater depth than in term one and to introduce new ideas specific to broadcasting.

In parallel with this theoretical work, and spanning the whole term, is Documentary Production, where you will work in small groups to conceive, research, shoot, and edit a short documentary film (ca. 10 minutes) on a set theme. As the term progresses, you will find it necessary to work outside the designated contact hours, organising yourselves around each other's availability and the various requirements of your film production. You will be assessed in groups on the basis of your film.

Term 3

Before the Easter break there is a workshop on professional crewing, scheduling and budgeting to prepare you for a month-long work placement beginning at the start of May. The placement is intended to complement the academic and practical elements of the MSc by providing some first-hand experience of the television and radio industries. We encourage host institutions to consider some modest remuneration or at least to cover some subsistence and travel expenses, but the majority of work placements are unpaid.

The exact list of work placements varies each year but some of our regular host organisations include Arrow Media, BBC Radio Science Unit, BBC Science (TV), Bigger Bang, Blink, Caravan, Clearstory, DSP, ITN, Lion Television, Pioneer, and Windfall.

You will be required to prepare a short report about your work placement. Submission of this report is compulsory as part of your MSc, but it does not count towards your final mark.

Work placements are co-ordinated by Gareth Mitchell. Gareth will ask you to indicate whether you prefer radio or television, and to submit a copy of a well-composed CV. Please see the section on Careers for some advice on preparing for work placements.

For the remainder of the third term, you will attend development workshops with Bob Sternberg and gradually work up your proposals for your final projects.

You will also be able to attend three optional seminars on ethics this term. These will first introduce key ethics concepts, and then go into science ethics and practical applications, including the ethics of your own practical work.

Final Projects

These are substantial pieces of practical work in either radio or video accompanied by a written report. You are free to choose any topic for your work. Radio projects are undertaken singly, film projects in pairs or groups of three. Final projects must be pitched to Robert Sternberg or Gareth Mitchell for green-lighting before any production can begin. The pitch must include a written proposal, treatment, production schedule, and risk assessment. It is up to individuals/pairs/ groups to organise their own productions and to meet the various deadlines for ‘assemblies’, ‘rough cuts’ and ‘final cuts’ as agreed in the schedule.

Your Final Projects will be assessed against your initial proposal and treatment (contained in a production ‘dossier’). Markers will consider the following areas: key outcomes, intellectual engagement, technical skill and studentship. Greater detail will be given in a written brief at the start of the module.

Assessment

All assessed work is given a percentage mark. In group work, we assign a single mark to the whole group, unless serious problems have arisen. A mark of 70% or greater indicates distinction-level work; a mark of 60-69% indicates merit-level work; a mark of 50-59% indicates a pass; and a mark of less than 50% is a fail.

To be awarded a distinction in the degree overall you must have achieved a weighted average of 70% or over. To be awarded a merit in the degree overall, you must have achieved a weighted average of 60-69%. To be awarded a pass in the degree overall, you will have achieved a weighted average of 50-59%. Averages of X9.50 or over are rounded up.

As long as you work hard throughout the year, it is unlikely that you will fail. However, if you fail a module with a mark of 40-49%, you can still graduate provided no more than 15 credits have this mark. If you fail more than 15 credits, or have module marks below 40%, you will normally be given the chance to retake the module assessment(s) in the following year. You will normally not have to attend the module's seminars for this. There are no earlier resit opportunities.

Final degree classifications are determined at the Examinations Board, usually held in late November or December. Because we have close knowledge of our students, students are named during the Board's deliberations.

Full details of the assessment regulations and the College's appeals procedure can be found at: www.imperial.ac.uk/about/governance/academic-governance.

The credit weightings of each module are given below for each MSc. All academic essays carry equal weight.

Assessment scheme – MSc Science Communication

Science and its Social Contexts	10 credits
2 coursework essays (2000 words each)	50% each
Media Representation of Science	10 credits
2 coursework essays (2000 words each)	50% each
Academic option 1	5 credits
1 coursework essay (2000 words)	100%
Academic option 2	5 credits
1 coursework essay (2000 words)	100%
Academic option 3	5 credits
1 coursework essay (2000 words)	100%
Science Communication Practical Projects	30 credits
Group project and commentaries	33%
Practical option 1	33%
Practical option 2	33%
Dissertation	25 credits
Dissertation (10,000 words)	100%

Assessment scheme – MSc Science Media Production

Science and its Social Contexts	10 credits
2 coursework essays (2000 words each)	50% each
Introduction to Film Form	10 credits
2 coursework essays (2000 words each)	50% each
Documentary Film	5 credits
1 coursework essay (2000 words)	100%
Narrative	5 credits
1 coursework essay (2000 words)	100%
Sounds Signs and Meaning in Radio	5 credits
1 coursework essay (2000 words)	100%
SMP Practical Projects	25 credits
Radio Production project	50%
Documentary Production project	50%
SMP Final Project Module	30 credits
Film or radio documentary	80%
Written dossier	20%

Coursework assignments

You will have to do a large number of assignments as part of your Master's coursework. The purpose of these assignments is to help you engage with the ideas presented over the course of the modules and to enhance your understanding of the relevant issues. This means that, unlike many science assignments, the assignments are not about regurgitating facts but are about active interpretation and critical analysis.

Each assignment will have a set deadline. Meeting deadlines is a key skill for all media-related work, and we expect all students to meet these deadlines punctually. You will be given details of the assignments at least two weeks before the deadline.

The assignments will normally be marked within three weeks. A copy will be returned to you with a grade and comments from the marker for feedback. You should read these comments carefully to help you reflect on your learning. Double marking of coursework assignments normally takes place later in the year. All grades given out during the year are provisional until after the meeting of the Board of Examiners at the end of the year.

Submission of assignments

All coursework assignments should be submitted via email to Liam Watson by 1pm on the day of the set deadline, unless the course's tutor gives you other instructions. Assignments may also be submitted at any time before the deadline.

You will be given a word limit for all your written assignments: usually 2000 words for essays. These limits are maxima, so should not be exceeded – this again is a key skill for media-related work. The word count includes headings, quotations, footnotes, and figure captions, but does not include the cover sheet or bibliography. You should state the final word count of your essay on the cover sheet.

Unless otherwise stipulated by the tutor, all assignments should:

- be formatted with page numbers, double-spaced lines, and wide (1 inch/2.5 cm) margins to leave space for tutors to write comments.

- be submitted by email to liam.watson@imperial.ac.uk, as a pdf, with the file naming convention: Surname_Initial_ModuleName

- be properly referenced with a full bibliography of all the works used in the assignment (see below).

- include a cover sheet which clearly shows your name, the title of the assignment, the name of the module, the name of the tutor who set the assignment, the date, and your word count. You will find the template for the cover sheet on Blackboard. You must use this template for all assignments.

Assignments must be all your own work (or that of other group members in the case of group work). Any material taken from other sources must be acknowledged (see below for details of how to reference correctly). Failure to acknowledge sources correctly may lead to plagiarism.

If you have used photographs, music, or other non-written material not created by yourself, you must always include a credit to the source. It is permissible to use copyrighted material for educational purposes (this is considered 'fair use'), so such material can be used for an assignment submission but not for something published online or in a magazine. In all cases, please include details of the copyright restrictions or license in the source credit.

Your submitted assignment may be shown to future cohorts of students or may be posted on the Science Communication Unit's website. It is your responsibility to ensure that any interviewees included in your finished piece agree to this potential use. If you do not wish your assignment to be used in this way, you must say so clearly on the cover sheet.

Extensions and mitigating circumstances

If you are unable to meet a deadline, you should email the tutor who set the assignment before the deadline. In cases of illness or severe personal problems, the tutor will be able to give you an extension. Please note that extensions cannot be granted for reasons of lost files, transport difficulties, poor time management, and so on. College policy is that any work submitted late without the prior approval of an extension will be capped at 50% if up to one calendar day late and will receive a mark of zero if more than one calendar day late.

In nearly all cases, personal difficulties can be managed through extensions. However, in the case of very severe problems this may not be possible. In these cases, you may need to apply for mitigating circumstances to be taken into account by the Examinations Board. Your personal tutor or course director will be able to advise whether this is appropriate in your case. Note that the mitigating circumstances procedure does not apply to chronic conditions. These should be managed with the support of the Disability Advisory Service: www.imperial.ac.uk/disabilityadvisoryservice

Applications for mitigating circumstances must be received within ten days of the date of the assessment deadline and must be supported by independent documentary evidence such as a doctor's note. The mitigating circumstances procedure and form can be found at: https://www.imperial.ac.uk/about/governance/academic-governance/academic-policy/exams-and-assessment/.

Whatever difficulties you may be facing, it is always best to get in touch with your lecturer or personal tutor sooner rather than later and before an assessment deadline if you can.

Assessing essay assignments

The base line performance for a pass mark (50-59%) is for there to be clear evidence of learning and the formulation of the basis of an argument, the absence of major errors of fact or distortions of

interpretation, adequate referencing (see below), and adequate use of grammar and style.

In addition, a merit-level performance (60-69%) will show evidence of further reading and will offer a well-reasoned and well-evidenced argument. It will be written in a clear and engaging style.

A distinction-level performance (70% and over) will show evidence of extensive reading, an insightful understanding of different positions on the issues, and the development of a compelling critical argument in favour of one position and against others. It will also be fluently and engagingly written.

It is important that all assignments are written in correct English. Make sure you spell- and grammar-check your work and proofread it carefully before submission. If there are any grammatical points you are not sure of, try looking up an online style guide, such as that of the *Guardian*, available at https://www.theguardian.com/guardian-observer-style-guide-a. For punctuation, see this abbreviated version of the widely used guide by Larry Trask: www.sussex.ac.uk/informatics/punctuation/.

Regarding national spelling conventions, it is most important for us that you are consistent: pick a spelling convention and stick with it in all your written work. Generally, we advise students to use the spelling of the English you have been formally taught. This means that UK students should follow either the Collins or the Oxford dictionary; international students can choose to follow either of these British spellings, or Standard American, Canadian, or Australian.

How to reference properly

As ethical scholars, all students should be in the habit of crediting all the sources used in writing an academic essay. It is important that any honest researcher gives credit to all those whose work they have incorporated into their own.

Accurate referencing of the sources you have used is a time-consuming, but necessary, chore, even with software like Zotero or

Mendeley relieving some of the work. Standard conventions govern how you should present references to previous work. This should allow someone else (or you if you have mislaid your notes) to find the information you used quickly and easily. Others can then check whether you have reported the views or facts given in your sources accurately. This allows them to assess how the conclusions you draw, or the insights you claim, relate to the state of knowledge before you added your contribution.

You should only ever reference the sources you actually consulted. Where you find out about an author by reading what someone else has said about them, you must refer to that latter source if you are not able to consult the original author's work directly yourself.

We require that you use the Harvard system of referencing, which is explained below. The Harvard system uses in-text citations. This is the most common form of referencing, so it may already be familiar to you. Please do *not* use any alternative system.

Where you have included other types of material in your assignment, such as pictures, you should include a credit to the source in the picture caption. This does not need to appear in the bibliography.

Practical work should be referenced according to the professional norms of the medium, but you may also be asked to submit a separate list of source material, including copyright details where appropriate.

Plagiarism

Plagiarism is the presentation of another person's thoughts, words, images or diagrams as though they were your own. Another form of plagiarism is self-plagiarism, which involves using your own prior work without acknowledging its reuse. Plagiarism is considered a cheating offence and must be avoided in all your coursework essays and project work. As long as you take care to reference correctly you need not worry about plagiarism.

Where plagiarism is detected in group work, members of that group

may be deemed to have collective responsibility for the integrity of work submitted by that group and may be liable for any penalty imposed, proportionate to their contribution.

The College requires that all students complete an online plagiarism awareness course. This is compulsory and it would be best to do it at the start of the year. It takes about 1.5 hours to complete and can be found on Blackboard. You will be automatically enrolled; if you cannot find the link on your Blackboard page you can access the course via https://www.imperial.ac.uk/students/academic-support/graduate-school/professional-development/masters-students/plagiarism-online/.

For further information, please see: www.imperial.ac.uk/admin-services/library/learning-support/plagiarism-awareness/.

The Harvard system of referencing

In the Harvard system, the citation is given between brackets in the main text and contains the names of the authors of the work referred to and the date of publication. All the citations are then fully listed in alphabetical order as a bibliography at the end of the essay. This makes it relatively easy to match up a point in the text with the full reference to the citation in the bibliography.

References in the body of the text should be in the following format:

a) Direct references require author, date, and page number, e.g.

   White (1981: 23) argues that: “The notion that sequences of real events possess the formal attributes of the stories we tell about imaginary events could only have its origin in wishes, daydreams, reveries.”

b) If you paraphrase someone, give the author and date, e.g.

   Wildlife films owe more to Hollywood film narratives than to scientific accounts of animal behaviour (Bousé, 2000).

c) If you quote or paraphrase jointly authored material, you must give both authors' names, e.g. (Welsh and Wynne, 2013). If there are more than two authors, then (Davies *et al.,* 2008) will suffice.

d) Material extracted from several sources should be shown in the following way:

> The standard account of the public engagement with science entailing a shift from a deficit model approach to dialogue is flawed in several respects (Bucchi, 2008, 2013; Davies *et al.*, 2008; Welsh and Wynne, 2013)

The bibliography

Bibliographies are designed to make it very clear who wrote a given book or article, what it is called and where and by whom it was published. Your essays must always include a bibliography at the end. Your bibliography should list all the works you have used. Works should be listed in alphabetical order of the author's surname. You should provide:

a) the name of the author(s) giving surname first and then initials or first names.

b) date of publication. Usually this is simply the year of publication, but for newspapers or magazines it will include the full date.

c) the full title of the work. For a book this should be in italics.

d) the place of publication. For a book this should be the name of the publisher and the city in which they are based; for an essay in a collection this should also include the title and editor(s) or the collection; for a journal article give the name of the journal (in italics) and the issue and volume number.

e) for a journal article or essay from a collection, you should give the page numbers of your item.

f) other kinds of material, such as TV programmes, should be referenced using the above as a basis.

Take particular care ensuring that the correct part of the reference is in italics.

The following is an example of a bibliography listing an episode from a TV series, a book, an online newspaper article, a website, a journal article and an essay from an edited collection:

BBC, 2016. Cities. *Planet Earth II*. BBC One, 11 December.

Bousé, D., 2000. *Wildlife Films*. Philadelphia: University of Pennsylvania Press.

Holliman, R., 2016. What has science communication ever done for us? *The Guardian*, 10 May, https://www.theguardian.com/science/political-science/2016/may/10/what-has-science-communication-ever-done-for-us.

Science Media Centre, 2020. *Press Briefings*, https://www.sciencemediacentre.org/working-with-us/for-journalists/briefings-for-journalists/.

Silverstone, R., 1984. Narrative strategies in television science – a case study. *Media Culture and Society*, 6: 377-410.

White, H., 1981. The value of narrativity in the representation of reality. In W.J.T. Mitchell (ed.) *On Narrative*. Chicago: Chicago University Press, 1-23.

Further information about using the Harvard system can be found on the library website. This website includes detailed guidance on how to reference different types of work, from books to social media posts and generative AI: www.imperial.ac.uk/admin-services/library/learning-support/reference-management/harvard-style/

Libraries

Imperial College Library Services

The College's main library, the Abdus Salam Library, is housed in the building next to the Science Communication Unit on the South Kensington Campus. It has a small but growing collection of humanities and social science books and journals in print and online, and each year adds all of the reading material for both our Master's degrees to its collection. The librarian responsible for our master's programmes is Rosemary Russell (020 7594 8611; libbpd@imperial.ac.uk). Rosemary and other members of the team are happy to answer your library queries, show you how to use the library databases and direct you towards other learning resources.

To find resources, use the Library Search at www.imperial.ac.uk/admin-services/library/. As well as the print book catalogue, this provides online access to ebooks, journals and many other resources. Use your Imperial College username and password to access resources remotely. The Library provides information about remote access to online resources here: www.imperial.ac.uk/admin-services/library/find-books-articles-and-more/passwords-and-working-off-site/.

The library web pages for our courses provide links to a variety of databases which may be useful throughout your course: www.imperial.ac.uk/admin-services/library/subject-support/science-communication/. These include Web of Science (humanities and social science journal searching, abstracts and links to full text articles where available) and the Humanities Index. Another good way of locating academic papers and books is through Google Scholar: scholar.google.co.uk.

Students can request print books, electronic journal articles or book chapters if the Library does not hold the item or a subscription. Do so via the Document delivery service at: www.imperial.ac.uk/admin-services/library/find-books-articles-and-more/document-delivery/.

Electronic resources are normally delivered directly to your email address.

The Library also welcomes suggestions for new books, journals and other resources for purchase. If titles are available as e-books, they can often be purchased and made available to students the same day. See: www.imperial.ac.uk/admin-services/library/find-books-articles-and-more/suggest-a-book/.

The Library has access to the main journals relevant to science communication. These are:

Environmental Communication
JCOM: Journal of Science Communication
Public Understanding of Science
Science as Culture
Science Communication
Science, Technology & Human Values
Social Studies of Science

The following journals may also be of some interest and are either accessible through the library's catalogue or include open access articles on their websites:

British Journal for the History of Science
British Journal for the Philosophy of Science
Critical Studies in Media Communication
International Journal of Science Education, Part B
Isis
Media, Culture and Society
Minerva: Review of Science, Learning & Policy
New Genetics and Society
Philosophy of Science
Research Policy
Science in Context
Science Fiction Studies
Screen
Studies in History and Philosophy of Science

The Library also subscribes to *Nature*, *New Scientist*, *Science*, *Discovery* and *Focus*.

Other libraries

The Science Museum Library in the Dana Centre, just a few yards from Imperial's South Kensington Campus at 165 Queens Gate, has an extensive collection of works relevant to our courses. Many of these are shelved in the reading room (which also provides a pleasant study space), whilst others need to be ordered in advance. Imperial College postgraduates are able to borrow books from this library.

Another library with useful resources is the Wellcome Library at 183 Euston Road. In addition to a range of reference books and historical texts, they keep clippings files of newspaper reports on a whole range of issues related to medicine and the life sciences. They also have an extensive video and audio collection on medical subjects. This is an open-access library, and the librarians are happy to arrange tours to introduce you to the library. They can be contacted through their website at https://wellcomecollection.org/collections.

Students at Imperial College are also welcome to use the library at the Royal College of Art, although you will need to apply for a library card. Applications can be obtained at the RCA library or from Robert Sternberg. The RCA library is small but has a media section and a video library from which films can be borrowed or viewed on site.

Science Communication and Science Media Production students also have access to Senate House Library on Malet Street in Bloomsbury, including borrowing rights and onsite access to all their online resources. You will need to apply through Imperial Library Services to register at Senate House. See: www.imperial.ac.uk/admin-services/library/use-the-library/using-other-libraries/.

Imperial students can also get reference-only access to some other University of London libraries. You might find of particular use the

libraries at Birkbeck College, the Institute of Education (IoE), LSE, and University College London (UCL).

As well as these libraries, you may be able to access other University Libraries. Regulations vary from library to library, but in some cases it may be possible to sign in as a visitor or get access during the holiday periods.

The British Library (https://www.bl.uk) is a copyright library, which means that a copy of every single book published in the UK is stored on its shelves. Registering with the British Library is free of charge, and can be helpful for obtaining access to research materials not available elsewhere.

The merged catalogue of UK research libraries is available at https://discover.libraryhub.jisc.ac.uk/. It can be useful for tracking down any hard-to-find works that you need for your studies.

Facilities

Email

Email is the best way of contacting staff, and most announcements will be made by email only. You will be given an Imperial College email account on registering. You should check this account regularly; it is this address that staff will use if they need to contact you. For help setting up your email, see: https://www.imperial.ac.uk/admin-services/ict/self-service/connect-communicate/email/how-to-guides/setting-up-and-using-email/.

Software

To help you with your practical assignments, the Adobe software suite is available for free to the students on both degrees. There will be introductory sessions about the software during the first term.

Research expenses

A small discretionary fund is available to contribute to unavoidable expenses associated with your project work. Such claims must be agreed on a case-by-case basis in advance by Felicity Mellor and will not be paid until the relevant receipts have been submitted.

Printing, scanning and copying

There is a printer connected to the S312 computers. You can also send documents from College computers to print on the department's two photocopiers. One of these can print in colour if required (but this is expensive so print black and white wherever possible). The photocopiers can also be used to scan documents to be sent to your email account. Printing, copying and scanning within the department is free of charge to our students. However, usage is monitored so please only print when necessary.

Science Communication area (S312 Sherfield)

The Science Communication area in S312 houses our dedicated video and radio edit suites, as well as several standard computers with internet connections. The latter are available to all Science Communication and Science Media Production students. These computers are provided for quick jobs that need to be done whilst you are at College rather than for writing assignments and other lengthy jobs. Anyone interested in a career in communications really needs to have their own computer and so we expect all students to have a home computer and/or a laptop. When using any of the department computers or equipment, please ensure you keep them clean and give them a wipe afterwards.

You may also use the computers and desks in room 309 whenever the room is not in use for teaching. Please check with Liam if you want to know the availability of the room.

Please observe the following rules when you use the computers:

- Wipe clean using before and after use with the disinfectant wipes provided.

- No eating or drinking next to the computers.

- Do not fiddle with any settings, disconnect or reconnect any cables or connectors whatsoever. In the event of a malfunction, please contact Liam Watson or Paul Chauncy. If the problem cannot be solved, we will call in someone from IT Services. Please do not contact IT Services yourselves; service arrangements can only be activated using the ‘proper’ channels.

- You should save any material you are working on to your own memory stick or in the cloud at the end of your session. Nothing left in the hard drive will necessarily stay there.

- The computers themselves should remain on at all times (because debugging and virus checks go on overnight). Only the monitors and the printer should be turned off at night.

- Access to the Science Communication Area S312 and room 309 is by ID swipe card.

- The last person to leave in the evening is responsible for turning off the screens and printer and ensuring that the door is shut.

To operate an open plan work space effectively and avoid distracting each other, noise should to be kept to a minimum. Therefore:

- Please conduct all mobile phone conversations out by the lifts.

- Please use headphones on all edit suites.

- Please do not use the Science Communication area as a general social space and keep your interactions to business in hand. If you feel an urge to conduct a loud conversation coming on, please make sure you conduct it elsewhere.

- Please do not leave your belongings, film props or general mess lying about.

Please do not enter staff offices unless the member of staff is there. If you need access to an office for equipment or other materials, please ask a member of staff for help.

Careers

Graduates of both the MSc in Science Communication and the MSc in Science Media Production go on to a range of careers including journalism, scientific publishing, documentary production, museums, public relations, science policy and science outreach. Most such jobs do not ask for a Master's qualification as an essential requirement, but your degree will show your commitment to, and aptitude for, communication-related work. What you do during your time on the course should help you to build up a more impressive CV and enable you to talk confidently and intelligently at interview.

What kind of job should you apply for?

Use your time on the MSc to think about what aspect of science communication suits you best. The courses aim to help you do this in several ways: the academic and practical modules will give you insights into each discipline; the seminars enable you to talk informally with people who have careers in science communication; and work placements will give you the opportunity to experience the workplace and to make useful contacts. Using your free time to gain experience in different sectors and to talk to people already working in the field will also be helpful (see the section on tips on applying for jobs).

Try to be open minded about the kinds of careers that are available, and be honest with yourself about what kind of environment you want to work in. A job in a cut-throat media company may not suit the shy, retiring type, and conversely, a job requiring a careful eye for detail may not suit someone who gets bored unless rushing around.

You also need to be realistic about what to expect when you graduate. It is unlikely that you will get your dream job straight away, so think about what jobs will help you build your skills and experience so that you can fulfil your ambitions. You may find yourself working on short-term contracts – see this as a way to build contacts and gain experience.

Some students aspire to working as freelance science communicators. This is a difficult route, and most freelance workers will have taken the plunge after several years in their field. Having said that, if you are offered some freelance work that sounds interesting, there is no reason not to take it. However, you must register as self-employed with HMRC: this is true even if you only do one piece of freelance work! You can find out how to register here: www.hmrc.gov.uk/selfemployed/index.shtml.

Finding a job

Although you won't be looking for work until the end of the year, it is a good idea to get into the habit of looking at job adverts early on. By looking at emerging opportunities and making contacts, you should be able to build an understanding of the market. Where jobs are advertised will depend on the precise sector you are interested in.

There are two mailing lists it is worth subscribing to early. The psci-com email list often carries job adverts, especially for outreach, public relations and engagement within scientific organisations: https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=PSCI-COM. The SciCommer, a weekly newsletter curated by Dr Heather Doran at the University of Dundee, rounds up science communication internship and job adverts around the world, as well as useful notices for events and conferences: https://thescicommer.substack.com/.

The ScicommJobs blog is maintained by Jo Brodie, who also owns the psci-com mailing list. It is updated irregularly, but contains a vast archive of science communication job adverts, which can help you get a feel for some of the types of job available: http://scicommjobs.wordpress.com (twitter feed: @ScicommJobs).

The Guardian carries some relevant job adverts at https://jobs.theguardian.com/jobs/, especially in the media and PR. Trade journals and their websites also carry adverts, e.g. *Broadcast* for broadcast jobs in TV and radio; *Museums Journal* for jobs in the museums sector; *Campaign* for jobs in advertising and PR.

Some tips on applying for work

1. The first stage in applying for jobs is to build up a relevant body of experience to list on your CV and, where appropriate, to produce a portfolio of work to demonstrate your abilities. You should use your free time to augment your experience: for example, writing for *Felix* or *I, Science*, volunteering at a museum or working for IC radio. Full-time students in particular should make the most of their time as a science communication student based in London. Go to seminars, openings, festivals and events at the local museums and across the city. Post online and discuss news, projects and events: many science communication professionals are active on Instagram, TikTok, and for more professional networking, Twitter/X or Bluesky and LinkedIn. Talk to people already working in science communication, start to forge a name for yourself, volunteer, network, and make friends with your professional community. The relationships you make this year – with your fellow students and with others you meet along the way – will support you throughout your career.

2. Remember that you will almost certainly need to tweak your CV for every job you apply for, including work placements. Most often it is your CV that stands between you and an interview, so it is worth spending time on. CV writing is an art, but there are plenty of sources of help, including the Careers Advisory Service (see below).

3. Make sure you thoroughly research the field that you want to go into and the company to which you are applying. This will help you write your CV and will help at interview. It's no good being interviewed for a job at, say, a television production company if you haven't seen any of the programmes it has produced, or if you are not able to talk about television output and the industry in general. You should be able to talk about what you think is good about what the company does; gaps in what they do that could be filled; who their competitors are and how they compare. At an interview, you don't want to sound arrogant or tell the interviewers how to do their jobs, but you do want to sound informed about the work they do.

4. Make sure that you understand the role that you are applying for: if you are applying to be a policy officer at a medical charity, ensure that you have an idea of what that role will involve. Again, this will help you when preparing your CV. Don't be afraid to ask questions about the details of the job at interview.

5. Most jobs require references, and your tutors will be happy to supply these, but please ask us first. Employers often want references in a hurry, so it is helpful if you let staff know in good time that a reference might be needed. If you would like, do talk to staff about a job application, since an extra perspective might be helpful.

Further careers advice

The Imperial College Careers Service offers advice on possible career paths, job applications, and interview technique. The Service is available whilst you are a student and for three years after you graduate.

The Careers Service is based on level 5 of the Sherfield Building and can be contacted at careers@imperial.ac.uk. Also see: www.imperial.ac.uk/careers/.

In addition to the support offered by the Careers Service, over the course of the year we will hold some careers-oriented seminars, and you will have a chance to meet graduates from our courses to hear about their careers.

Doctoral study

Some of you may be interested in continuing with academic study after you have completed your Master's degree. The Science Communication Unit runs a small PhD programme and we are very happy to talk to any students contemplating further study, either with us or at another institution. You will need both a Distinction as your

overall grade and a Distinction for your dissertation to be admissible to the PhD at Imperial (as well as many similar universities).

One of the main challenges for doctoral study is finding funding. Currently we have no studentships available within the Science Communication Unit, so applicants need to find their own sources of funding. Some universities have deadlines as early as December for applications to funded PhDs to start in September the next year, so if you are interested in this option, start thinking about it early.

Safety Issues

You are responsible for looking after your own health and safety and that of others affected by your College-related work and leisure activities. You must:

- comply with all local and university policies, procedures and codes of practice, and with the arrangements which Imperial College has in place to control health and safety risks.
- ensure that your activities do not present unnecessary or uncontrolled risks to yourself or to others.
- attend appropriate induction and training.
- report any accidents, unsafe circumstances or work-related ill health of which you become aware to the appropriate person.
- not interfere with any equipment provided for Health and Safety.
- inform your supervisor or the person in charge of the activity in cases where you are not confident that you are competent to carry out a work or leisure activity safely, rather than compromise your own safety or the safety of others.

Computer screens

Wherever possible, try to mix work using a computer with other work, to minimise the risk of eye strain, headaches, or aches and pains in your hands, wrists, arms, neck, shoulders or back. Where long periods of computer-based work are unavoidable:

- Take regular, short breaks.
- Change your posture as often as possible.

- Look away from the screen frequently to allow your eyes to relax. Remember, when you are in an online meeting, you don't have to stare at the screen the whole time, any more than you would stare at someone you were sitting with!

Ensure that when you are at a computer you do the following things:

- Adjust the chair so that your arms are approximately horizontal and your eyes at the same height as the top of the screen casing.

- Ensure that your legs can move freely under the work surface, remove any boxes or equipment that may be in the way.

- Don't bend your hands at the wrists while typing.

- Try to keep a soft touch on the keys and don't overstretch your fingers.

- Make sure you have enough space for the documents you need.

If you experience any health problems which you believe may result from working with computers, the College Occupational Health Service will be able to offer advice in the first instance.

Manual handling

Some practical options may involve you lifting or carrying equipment or heavy objects. There is unlikely to be any lifting or transporting machinery available to help you, so you will have to do everything by hand. You should observe sensible precautions when handling heavy objects. The key things to remember are the following:

- Think carefully before carrying or setting up equipment in awkward or confined spaces. Plan how you will do the handling and look where you are going. Be extremely careful not to trip or overbalance.

- Take special care not to twist your back or stretch excessively while carrying or supporting heavy equipment.

- If lifting a heavy object from the ground to waist or above waist height, you should use good handling technique. Essentially this means squatting down to get hold of the object and then lifting by straightening your legs while keeping your back straight. You should not bend at the waist and extend your arms to pick up the object because you will then be lifting with a bent back, which is bad handling practice.

- If you have any history of back trouble, you should not attempt to handle heavy or bulky equipment in the field.

Electrical safety

Almost a quarter of all reported electrical accidents involve portable equipment, just the sort of kit you will be using for radio and television work. In all cases there is a potential danger of electric shock, electrocution or fire.

All these risks can be minimised by following this advice:

- All equipment issued to you should be in full, correct working order and will have been checked for electrical safety. Nevertheless, you should also look over the equipment yourself before you take it away. Ninety-five percent of all faults in such equipment can be located by visual inspection. The most obvious things to be aware of are:

    - loose wires or exposed terminals;
    - damage to cables and/or plugs or non-standard joints;
    - no properly gripped cable sheaths where cables enter plugs;
    - damage to the casings or fastenings of the equipment itself;
    - burn marks or stains on the equipment or on plugs and cables.

- If faults, breakages or malfunctions occur while you are using equipment, report and return the equipment immediately so that it can be serviced or repaired before any more harm is done. Do not undertake repairs or maintenance yourself.

- Always use the equipment properly. You will be trained in how to operate all the equipment you are using.

- Try to avoid using equipment under harsh field conditions. Keep equipment dry and away from excessive dust, humidity or corrosive solvents.

- Mains operated equipment must have the correct fuse in the plug and mains sockets must not be overloaded. Take great care with adapters, plugboards and trailing cables.

Personal safety on location

All the practical options may involve you travelling beyond the campus. You will not be supervised on these trips. Many of the places you visit will be unfamiliar to you and you may be carrying valuable equipment.

This exposes you to health and safety risks beyond those you are used to in your personal and college life. Equipment could be stolen, and you could be injured if that happened. It is therefore essential that you try to foresee any increased risks to which you are exposed and then try to minimise those risks as far as possible. You may need to carry out a risk assessment.

A risk assessment is nothing more than a careful consideration of what might, on location, cause harm to yourself or other people, so that you can weigh up whether you have taken enough precautions or should do more to prevent harm. The aim is to make sure that no-one gets hurt and nothing gets damaged or stolen.

There are five stages in conducting a risk assessment:

1. List the potential hazards you can foresee in the areas you intend to visit and situations in which you will put yourself.

2. Identify who might be harmed and how.

3. Evaluate the risks arising from the hazards and decide whether existing precautions are adequate or whether more should be done. Rank each hazard as high, medium or low risk. For medium and high risks, decide how your actions should be modified to reduce risk. In an extreme case, you may decide the risk is too high to make the visit or to undertake the task you had planned.

4. Record what special precautions or actions you decide to take in the light of your evaluation of risk.

5. Review your risk assessment in the light of how the location visit turned out in practice. Review it again if you undertake similar location work at a later date.

Any written records of such assessments, with any review statements appended to them, should be lodged with the relevant module tutor.

The following general points should be borne in mind by everyone undertaking location visits on the practical options.

- If an accident, theft or emergency occurs when you are on location, this should be reported to us immediately, preferably by phone to Liam Watson: 020 7594 8753.

- When using expensive equipment, try always to operate in pairs or groups. Never leave a single person to ‘guard’ a lot of equipment. If staying overnight or visiting a café or restaurant, take all equipment with you (or if it is in the boot of a car, keep that car in sight if at all possible).

- Be as vigilant of your personal safety as you would be at any other time.

- If you anticipate entering an area where theft or violence might be expected or you are going to hike across country away from habitation, inform a local person (hotel manager, police) of your intention and expected return time.

- Dress sensibly at all times and appropriately for your location and task.

- Behave courteously and considerately to people on location at all times.

- Always obtain permission (preferably in writing beforehand) if you want to enter private property.

- If you are going to use a car for location transport, you need to check your insurance policy and make sure you are covered before you use it for that purpose.

- Use common sense at all times and do not put yourself in the position where you could fall into water or down a steep slope. Watch out especially for traffic.

Further information

Further details about safety issues can be found on Imperial College's website at www.imperial.ac.uk/safety.

Imperial College has a 24-hour emergency phone line: 020 7589 1000.

The extension number for security on the South Kensington Campus is 4444.

Appendix

Student Feedback

Throughout your time at Imperial, you will be regularly able to give feedback on your experience via surveys conducted by your department, the College, and Imperial College Union.

Module Evaluation Questionnaire (MEQ)
The MEQ is your chance to tell us about the modules you have attended. The questionnaire is open to students across all years of study and runs at the end of the Autumn, Spring, and Summer terms. The survey is confidential. The more people take part, the more representative the results, so please take a few minutes to give your views.

Postgraduate Taught Experience Survey (PTES)
The PTES is a national survey for postgraduate students. It is run biannually by AdvanceHE, a higher education charity. The aims of the survey are similar to the NSS (National Student Survey) for final-year undergraduate students: to help us to assess how we are doing compared to other institutions, to make changes that will improve what we do in future, and to keep doing the things that are valued by our students. The results of the survey are published at https://www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys/postgraduate-taught-experience-survey-ptes/.

Imperial College Union
Imperial College Union solicits suggestions and feedback from students throughout the year, and campaigns Imperial College to have these suggestions implemented. The Union also responds to surveys like the PTES to advocate for change on behalf of the student body. Their responses to surveys can be found here: www.imperialcollegeunion.org/your-union/your-representatives/responses

If you would like to know more about any of these surveys or see the results from previous surveys, please visit: http://www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys/

Key Dates

Term dates

Autumn term:	28 September 2024 – 13 December 2024
Spring term:	4 January 2025 - 21 March 2025
Summer term:	26 April 2025 – 27 June 2025

Closure dates

Christmas/New Year:	23 December 2024 - 1 January 2025 (Imperial reopens on 2 January 2025)
Easter Holiday:	17 April 2025 – 22 April 2025 (Imperial reopens on 23 April 2025)
Early May Bank Holiday:	5 May 2025
Spring Bank Holiday:	26 May 2025
Summer Bank Holiday:	25 August 2025

Science Communication dissertation deadline and SMP summer project **deadline:**

Monday 15 September 2025

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