

Course outline: Directing and Producing Science and Natural History

The MFA in Directing and Producing Science and Natural History is a specialisation within the broader **MFA in Film, Television and Games**.

The course will focus on five core areas of Directing and Producing Science and Natural History for Film and Television:

- General film making skills
- Specialist Natural History film making skills
- Story telling for Science and Natural History
- Generation and pitching of editorial content
- The production of industry standard films from concept to transmission / publication

During their time at the National Film and Television School, students will produce a short (10 minute) first year film, a longer 2nd year film (approx. 20 minutes) as well as other shorter assessed film exercises to industry standards.

Year One**Springboard Cross Specialisation Introductory Workshop**

The first thing that happens at the start of the year is a week-long cross-school and interdisciplinary introduction to film and television, looking at cinematic language and televisual language through the prism of storytelling. It investigates how the main crafts of cinema and television, screenwriting, cinematography, visualisation, editing, sound and music relate to the way filmmaking puts across narrative ideas.

Screen Arts

All MFA students are required to attend the screen arts course which runs on Mondays. This is compulsory for term one. This is an invaluable opportunity for students to immerse themselves in film theory and enjoy screenings of a hugely diverse range of contemporary and historical work and hear lectures from industry specialists from all areas of film and television production.

Modules

The first year contains three assessed modules, and a wealth of other exercises and workshops:

- Module 1 – Wildlife Documentary
- Module 2 – Science Documentary
- Module 3 – SNH First Year Film

Module 1 - Wildlife Documentary

This module introduces the special skills required for wildlife documentary with a series of topics introduced in Terms 1 and 2 by tutors and visiting media practitioners. The main topics covered include:

- Macro photography skills
- Time lapse skills
- Long lens camera skills
- Wildlife storylines
- Use of sound and music within wildlife films

This module continues in Term 2, when students will produce macro and time-lapse camerawork plus a long lens wildlife actuality sequence and a field exercise at the Knepp estate in Sussex putting into practice the knowledge and skills they have learned in all three areas of camera and lens operation.

Module 2 - Science Documentary

This module requires students to work in teams to make a short film on a science subject, putting into practice the knowledge and skills they have learned in Term 1. The film should be less than 5 minutes and be such that it could either be a stand-alone film or an insert item for a longer science documentary, such as 'Horizon', or magazine programme, such as the 'One Show'. The students will be provided with a researcher by the Leverhulme Trust but will be expected to produce the story around the work of that scientist. Each member of the team will edit the group's shot material to produce their own version of the story, finishing the item to a standard suitable for showing online, and present this to the Leverhulme Trust. Students will write a short self-reflection piece about their experiences as part of the module.

Module 3 - SNH First Year Film

This module introduces students' Science and Natural History First Year Films, which are 10 minutes long. Preproduction and planning starts in Term 2, including seminars and tutorials on making a short form science or natural history documentary. In particular, there will be a focus on pitching an idea, writing proposals and shooting scripts, foreign filming, planning, budgeting, permits and visas, health and safety, risk assessments, customs and immigration & so on. The SNH First Year Films will be directed, produced, shot and edited by the students, who may wish to work with other students from their SNH year group who may assist with filming, sound recording.

The SNH First Year Film will be shot over a period of 30 days (from filming kit pick-up to return), using the Sony FS7 kits provided for this purpose. Films will be edited by the students, working with their allocated Composer to provide music for the production. Post production will take place in the first weeks of the second year, where students will work with a Sound Design student for one week, and will work with a Colour Grading student to finish their films to a standard suitable for showing on television or at a festival

Additional Content

Alongside these modules, there will be workshops and seminars looking at film making in a broader sense. These include sessions on health and safety, camera grammar, editing, writing and pitching a treatment, editing, commentary writing and post production skills (grading, track laying and dubbing).

Year Two

During the second year of the course students focus on putting their learning into practice by producing two films and preparing to enter the industry.

The second year contains the following two assessed modules:

- Module 4 – Creating the Impossible
- Module 5 – SNH Graduation Film

Other workshops and seminars are also included during the year, providing valuable further opportunities to learn.

Creating the Impossible

This module requires students to produce a short (3 – 5 minutes) film about an intangible idea – making a film about something which cannot be filmed. For example, cosmology, dark matter and dark energy, infinity and even pain, are not concepts which can be seen or therefore filmed, but compelling films can be – and are – made about their topics. The module accordingly aims to challenge students to stretch their imaginations and think about the visual image in a different way, also exploring the elements of graphics, animation, VFX, model making and games, and taking a deeper dive into sound design and use of music. It combines the conventional film making techniques which students have learned with more conceptual and experimental ways of creating visually compelling materials to represent and/or explain the intangible. Students are allowed and encouraged to use whatever is available to them (and which they are competent using) either at the NFTS or beyond to create imagery for their films, which they will edit themselves. While films produced in this module are expected to make sense (there will be a similar sign-off process to the other films on this course), the emphasis in this module is on experimentation and on quality rather than quantity.

SNH Graduation Film – Pre-Production Phase

The SNH Graduation Film will be a film made to full professional standards, able to be shown at a festival, or transmitted without additional external input. Students can specialise in science or natural history or opt to span both genres in this film. The commissioning brief is that the film must have an identifiable story (beginning, middle and end), be about science and/or natural history and be emotionally engaging. Three choices are suggested:

1. Those specialising in science will produce and direct a 20-minute* film, filming with scientists, using graphics (where appropriate) to convey complex information in an entertaining and visually arresting manner, plus support and ancillary material.
2. Those opting for wildlife subjects will produce and direct a 20 minute* 'blue chip' natural history film
3. A 20-minute* cross-genre film that breaks out of the limits of most current commercial documentary.

**20 minutes is a guide. Films are sometimes slightly shorter or longer, but students are discouraged from making films longer than 25 minutes in duration as they fall outside the time limit usually set by film festivals for the 'short film' category.*

In the first term of Year Two, projects will be pitched to a panel of industry professionals for sign-off. The projects will be assessed both for creative application of knowledge, robustness of the idea, understanding of technical, budgetary and other practical requirements, and the

student's ability to deliver. Part of the SNH Graduation Film will be its successful documentation and dissemination, and on completion, an event will be held where projects will be presented to a peer and invited industry audience. Students will film their project using equipment provided (or sourced) by the NFTS. The project will be edited by an Editing student, and will be supported by Composing, Sound Design and Colour Grading students. Students are supported throughout this module by regular tutorials with the Head of Department, mentors and visiting tutors as appropriate.

SNH Graduation Film – Production Phase

This is the period during which the graduation film is shot. A period of 60 days is allocated to this process, during which all the filming must take place. This is generally during July and August.

Students usually shoot their own films, often with the assistance of their SNH colleagues – however for this project collaboration with Cinematography students and Sound Recording students is allowed where appropriate.

SNH Graduation Film – Post Production Phase

This module which started in Term 1 continues in Term 3 as students move into post-production, working with Editing, Composing, Sound Design and Visual Effects students. Editing is conducted over a period of 6 weeks, with the first week being allocated for rushes viewing and project organisation. SNH students will work with a student Editor to complete their project. Periodic viewings (reviews) will take place where discussions with tutors will take place, and notes on potential improvements will be given. Students are expected to use these notes for the basis of future work on the project. Final sign-off by the Head of Department will result in the project being 'picture-locked' at the end of the edit period at which point the film can proceed to post production. Each film will have four weeks' track-lay and sound design, followed by a three-day audio mix. Again, this process will be monitored by tutors. Finally, a four-day colour-grade and online will be performed by a Colour Grading student. The finished film must be signed off by SNH, Sound and Colour Grading HoDs before it can be shown at the graduation showcase or be entered for festivals.

Other Seminars

Additionally, during the second-year students continue to take part in a series of seminars, tutorials, and meetings with industry specialists both in film and television.

Meet the Industry

This workshop includes a series of seminars by industry leaders in natural history and science film-making, to help inform students of post-graduation opportunities, the best way to write CVs and promote themselves and their work to equip themselves for the best chance of employment. Second year students also have access to a personal industry mentor throughout the second half of the final year.

Sizzle Reel & Trailer Production

One of the skills prized by the industry is the ability to edit a 'taster' or 'sizzle' reel, giving audio-visual life to an idea or concept for a tv or film project. Industry practitioners run this workshop where students are able to produce this material for their own – or specified future projects. Allied to this is the art of trailer making – an eye-catching 30 second 'advert' for your film – again useful for the future, but also in promoting your SNH Graduation Film. Students will be shown how to make a trailer for their SNH Graduation Film in this workshop.

Management and Leadership Tuition

A number of tutorials and seminars spread over both years, with the aim of equipping

students to function effectively as team leaders, managers and entrepreneurs.

SNH Dissertation

During the year the students also complete their Dissertation module (the outline of which dissertation is delivered in Year 1).

As part of the work necessary to qualify for an MFA, each student is required to produce an independent written dissertation or video essay. This runs from the middle of the 1st Year to June of the 2nd Year. Following discussions with the SNH Department Dissertation Tutor, and Screen Arts tutors in the first half of the 1st year, students deliver 500-word outline proposal by June of the 1st year; 2000-word detailed proposal and structure by November of the 1st Year (students may not progress into 2nd year if they fail to deliver this). Full draft dissertation of 7,000-10,000 words (including sources and bibliography) must be delivered by May of 2nd Year and following discussion with tutors, final version of dissertation by the end of June of the 2nd Year. Filming of the grad film project cannot commence until the dissertation has been successfully delivered.

An alternative option of a twenty minute video essay is also available to MFA students.

The aim should be to undertake original research of an investigative nature, which extends the boundaries of specialist knowledge within particular areas of Science and / or Natural History

The dissertation may encompass any aspect of SNH film making, and can focus primarily on the aesthetic and creative aspects of the craft – or, for example, on the impact of technological advances on this type of story telling, Students are advised to use the dissertation to help explore and develop their own practice, interests and identities as creative film makers. The dissertation also provides an opportunity to further explore the industry by generating primary sources for the work by conducting research interviews with relevant industry figures.