***If you are interested in this class, please contact Ruth Lingford at lingford@fas.harvard.edu. We will arrange a short conversation on zoom, and create the class list using a tiered lottery to enable a mix of arts and science students of different ages.***

In this class we will learn some fundamental animation skills and explore how they can be used to communicate abstract ideas effectively. We will look at scientific images and ideas as a basis for art-making. The class is suitable both for absolute beginners in animation and for those with some experience.

Students will learn a new facet of animation film-making every week. There will be a short introduction to a science topic, and students will be challenged to explore some part of this topic using the animation technique they are learning.

The second half of the semester will be devoted to self-defined personal projects, with frequent critiques and additional workshops to supplement students' film-making skills. These projects typically cover a range between dedicated technical work relating to students' own research and much looser art-based pieces which take as their starting point a scientific image or idea.

This course is popular with science students who wish to find a new way of communicating their thinking, and also with artists and animators looking for potential real-world applications of their skills.

The course is offered around every 3 years.

This is a very practical, hands-on course, with a mix of group instruction and one-to-one time.

**Grading**

Final Project 35%

Screening inputs (attendance/participation/written notes) 15%

Assignment 1  8%

Assignment 2  8%

Assignment 3  8%

Assignment 4  8%

Assignment 5  8%

Enrollment is capped at 12 students. Applicants are asked to fill in a questionnaire, and will be offered a brief Zoom interview to clarify any questions. Priority will be given to AFVS and MCB concentrators - other students will be admitted by a tiered lottery to allow a mix of scientists and artists, and a mix of years. Students will be notified by email.

Lecture slides

## Past syllabus:

Week 1. Sept 1st

Introduction to the course

Contour drawings

Pictionary with science words

Intro to TVPaint.

Assignment: Animate a science word

Week 2 Sept 13th

Guess the words! Discuss how well the animations work.

Abstraction, metaphor, story.

Intro to DragonFrame

Under the Camera animation.

Assignment: Animate a simple concept using under-the-camera technique

Week 3 Sept 20th

Intro to After Effects

Assignment - Animate a simple concept using After Effects

Week 4 Sept 27th

Visitor- intro to 3D

Assignment - science word in 3D

Week 5 Oct 4th

Look at assignments - discuss characteristics of different animation techniques and different approaches.

Real-world assignment - visiting scientist

(?work in pairs?)

OCT 11th IS A UNIVERSITY HOLIDAY

Week 6. Oct 18th

Sound

Intro to Premiere

Assignment: Finish Real-world assignment

Week 7 Oct 25th

Discuss ideas for individual projects

Assignment: Storyboard idea

Week 8 Nov 1st

Work on animatic

Assignment: Start animating

Week 9  Nov 8th

Animation and sound

Assignment: at least 20 seconds of animation

Week 10 Nov 15th

Premiere - editing

Assignment: at least 40 seconds of animation

Week 11 Nov 22nd

Finish films

Week 12 Nov 29th

Class critique of finished projects