

STAR Science Sketches Workshop

June 28th & July 2nd 2018

Instructor: Callie Chappell (calliech@stanford.edu)

Organization: STAR (Science Teaching through Art), Science Sketches

Course meeting times: Thursday, June 28th: 6:00-8:00 PM, Shriram 262

Monday, July 2nd: 6:00-8:00 PM, Shriram 262

I. Workshop Aims & Outcomes:

In this course, participants will learn how to develop a story about their research topic, communicate complex scientific concepts visually, and create a hand-drawn “Science Sketch” video about a scientific topic of their choice. At the end of the workshop, participants will leave with a video of their illustrations and a recorded voice over of the video, based on a script written during the workshop. Final videos may be featured on the Science Sketches and/or STAR website, with permission of the participant.

II. Course Outline:

▪ Thursday, June 28th: Introduction to Science Storytelling

➤ Before class:

1. Finalize a topic for your Science Sketch video; this could be a general topic in your research, an ongoing research project, a publication, or a general scientific concept.
2. Decide what type of video you want to make: (refer to Science Sketches website for examples and more information)
 - Introduction to a general scientific concept
 - Description of a topic in a research project or ongoing area of research in your lab
 - Video abstract of a recent or relevant publication
3. Think about what information you want to include in your video
4. Read Science Sketches Step-by-Step guide
(http://docs.wixstatic.com/ugd/16c366_d9d1877771004a80afcd659e14fe798f.pdf)

➤ Class outline:

1. The importance of knowing your audience
2. Elements of storytelling: how to craft a compelling narrative
3. Visual communication: integrating written and visual storytelling
4. Introduction to Science Sketches & components of a Science Sketch
5. Script writing: write a rough draft of a ~300 words for a 2-minute video
6. Writing workshop: iterate drafts of scripts
7. How to record your script
8. Illustration outline: generate storyboard of illustrations for video

By the end of class #1, you will leave with:

- a. ~200-word script for your video
- b. Storyboard of illustrations for your video

▪ **Monday, July 2nd: Recording a Science Sketch**

➤ **Before class:**

1. Record script with recording device; bring script to class in standard audio format (i.e. MP3, WMA)
2. Practice drawing illustrations you intend on drawing in your video
3. Re-read Science Sketches Step-by-Step guide
(http://docs.wixstatic.com/ugd/16c366_d9d1877771004a80afcd659e14fe798f.pdf)

➤ **What to bring to class:**

- Handheld device that records video, ideally something that can be held with a ring stand (computers or tablets not ideal), see diagram below. If you don't have something like this, STAR can provide.
- Model drawings, photos, or other materials you may want to include or aid in drawing your illustrations
- Your script from class #1.
- Optional: laptop computer or tablet for video editing (if you have time)

STAR will provide:

- Sharpies
- Drawing paper
- Ring stands
- Selfie lights

➤ **Class #2 outline:**

1. How to set up video recording (see diagram below)
2. How to edit and combine video and audio in iMovie (Windows Movie Maker also works!)
3. Work in pairs to record videos

By the end of class #1, you will leave with:

- a. Recording of your illustrations
- b. Knowing how to combine audio and video to make your Science Sketch

➤ **After class #2:**

1. Finish making your Science Sketch
2. Optional: Proudly send your video to STAR, Science Sketches, or post on your YouTube channel, lab, or personal website!