# 07. TeamsFacilities

Wednesday, September 11, 2019 6:20 PM

Today:

Team member Expectations Critique overview (07a) Facilities and Equipment

Bring to class: Zeroblasters Small fog machine Ultrasonic humidifier Desk toys

### Admin stuff:

- Please sit with your team, so you can discuss possibilities as they come up today
- Team First project plan and selfies due this Monday 9/20. Short statement of what you are planning to do. Each person, online in Canvas.
- Team First image due Weds 9/27. Same upload and posting requirements as Get Wet.
- Example Reports: Read the guidelines. Good reports: 2012 team First Ryan Kelley, Nicholas Travers
- Chem Stores: on campus source for glassware, chemicals, lab supplies (cash OK): <u>https://www.colorado.edu/chemistry/research/facilities/chemstores-chemstores-east</u>
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- Optics cleaning tips: <u>http://www.newport.com/How-to-Clean-Optics/141176/1033/content.aspx</u> for lab optics
- <u>https://www.adorama.com/alc/faq-how-to-clean-camera-lenses</u> for camera lenses
  Cleaning fluids: OK to buy a commercial variety, or try distilled water first, then isopropyl
  - (rubbing) alcohol, then ethyl alcohol (lab grade), then acetone as a last resort.

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# **Team Expectations**

Was it hard to work alone on your Get Wet?

- a) Yes
- b) A little
- c) No
- d) I prefer to work alone
- e) I didn't work alone I got help

2022	
Yes	35%
Not much	42
Prefer	23

Posted on Course Info page:

## Expectations For Teams Flow Visualization

Reasons for putting you on teams:

- So that you can attempt to image more complex flow phenomena. If the work of developing a setup is spread out among you, then you can try a challenging experiment.
- So that you can attempt more challenging imaging techniques. The teams were chosen to spread out photographic and fluids expertise and equipment amongst the teams.
- 3. To have partners to bounce ideas off of. This makes ideas multiply.
- 4. To get informal feedback on your work.
- 5. To interact with students from different backgrounds.

Thus, working on a team is STRONGLY EXPECTED, but not strictly required for the team assignments. You are not required to work only with your team, but you are expected to make significant effort to be available to help them with their images and ideas. You do not all have to use the same equipment. Do plan to spend at least an hour or two to help **each** of your teammates, and recognize that you can plan on having 4 to 8 person-hours at your disposal for your project. Plan multiple meetings. If you find you are not available for specific sessions, figure out how to make it up to your team.

I hope you will take advantage of the benefits of working in teams and of the opportunity to broaden your network. Strong recommendation: don't work only with your friends. Bad for you professionally.

Following from this, here are the expectations for the deliverables on the team assignments:

Each student is expected to turn in a unique image or video that they had primary artistic and scientific responsibility for. You must give credit appropriately in your report, by explicitly naming the teammates that contributed, and what they did.

Each image/vid must be accompanied by a report. If several images come out of the same setup, you can copy descriptions of the apparatus, and the basic physics. If appropriate, give credit to report section authors. Be sure to describe the details relevant to your particular image.

### Meet Your Team

- 1) Exchange contact info. Cell numbers at least
- 2) Take a group selfie with your table tents showing
- 3) Plan a meeting to plan Team First Project
- 4) Review equipment and facilities:

### **Equipment and Facilities**

Handout. Discuss in your team - 10 minutes

## **In-Class Critiques:**

- 1. Log in to FlowVis.org
- 2. Category >2023 Fall Get Wet or find the author in the right hand column

# 3. For each image, verbalize and type (in Comments on Flowvis.org post) at least one substantive comment:

- 1. A statement of meaning or
- 2. A response to a question from the artist or
- 3. A neutral question or
- 4. Ask to offer an opinion. Later the artist will respond; if yes, then add your opinion. OK to balance with suggestions for improvement.

It's easy to criticize, but being able to articulate the strengths of a colleague's work is an extremely valuable skill. Then instead of criticizing, ask about choices; why was it done like that? This is the "neutral question"

See Critique Suggestion sheet on Flowvis.org>Class Info> left sidebar

 References for some physics are in our Zotero Library. See document on Course Info page: http://www.flowvis.org/wp-content/uploads/2019/09/Zotero-Instructions.pdf

Our critique method is adapted from

Lerman, Liz. Critical Response Process: A Method for Getting Useful Feedback on Anything You Make, from Dance to Dessert. EBook., 2002. <u>https://www.amazon.com/Liz-Lermans-Critical-Response-Process-ebook/dp/B00CF8MYD6/ref=sr 1 1?crid=33FL1ANVGPYPF&keywords=liz+lerman%2Caps%2C576&sr= 27s+critical+response+process&gid=1565033305&s=gateway&sprefix=liz+lerman%2Caps%2C576&sr= <u>8-1</u>.</u>

Step 0: Author presents. Describes setup, what is seen.

[Interrupting at some point during the critique: Expert asks questions, then offers suggestions of physics. Make note of the terms so you can look them up for your report.]

Stop 1. Statements of Magning

- Step 1: Statements of Meaning
  - What does this image/vid say about fluids? What is being shown?

What does this image/vid say about aesthetics? Does it strike you with beauty, power, destruction or oddness? Or some other aesthetic?

What does this image/vid say about imaging technique? Does it impress you, or inspire questions? Are there other meanings in the image/vid?

If making a positive comment, BE HONEST and SPECIFIC. What did you like and why? DO NOT JUST SAY 'good job'

Step 2: Artist as Questioner

The student presenting can ask for specific feedback to guide further development of the work: "What do you think of the way it is cropped? What about the color? Did you notice where the light pole was edited out" etc. Don't ask just 'what do you think', that's too vague. You'll get more useful answers if your question is focused.

Step 3: Neutral questions from Responders (audience).

This is tough, to ask a question without embedding an opinion. It will take practice. For example, instead of "It's kind of dark" or "why is it so dark at the bottom" ask "what do you think about the balance of light and dark areas?" Be sure to ask about the fluid physics: "why does it look like that?"

Step 4: Permissioned Opinions

Responders name the topic of their opinion, then ask the artist for permission to state it. For example, "I have an opinion about the depth of field and the focus. Do you want to hear it?" The artist can answer yes or no. If you already know that the focus was bad and what to do, you can