

# Organic Chemistry Flipped Classroom

By Caroline Cormier and Bruno Voisard

## Description:

In this semester-long activity, the class is flipped in order for students to be more engaged and receive extra help if needed. By the end, students will have produced a portfolio containing all of their organic chemistry exercises completed throughout the semester. See a full description [here](#).



Out of Class (Instructor)



Out of Class (Students)

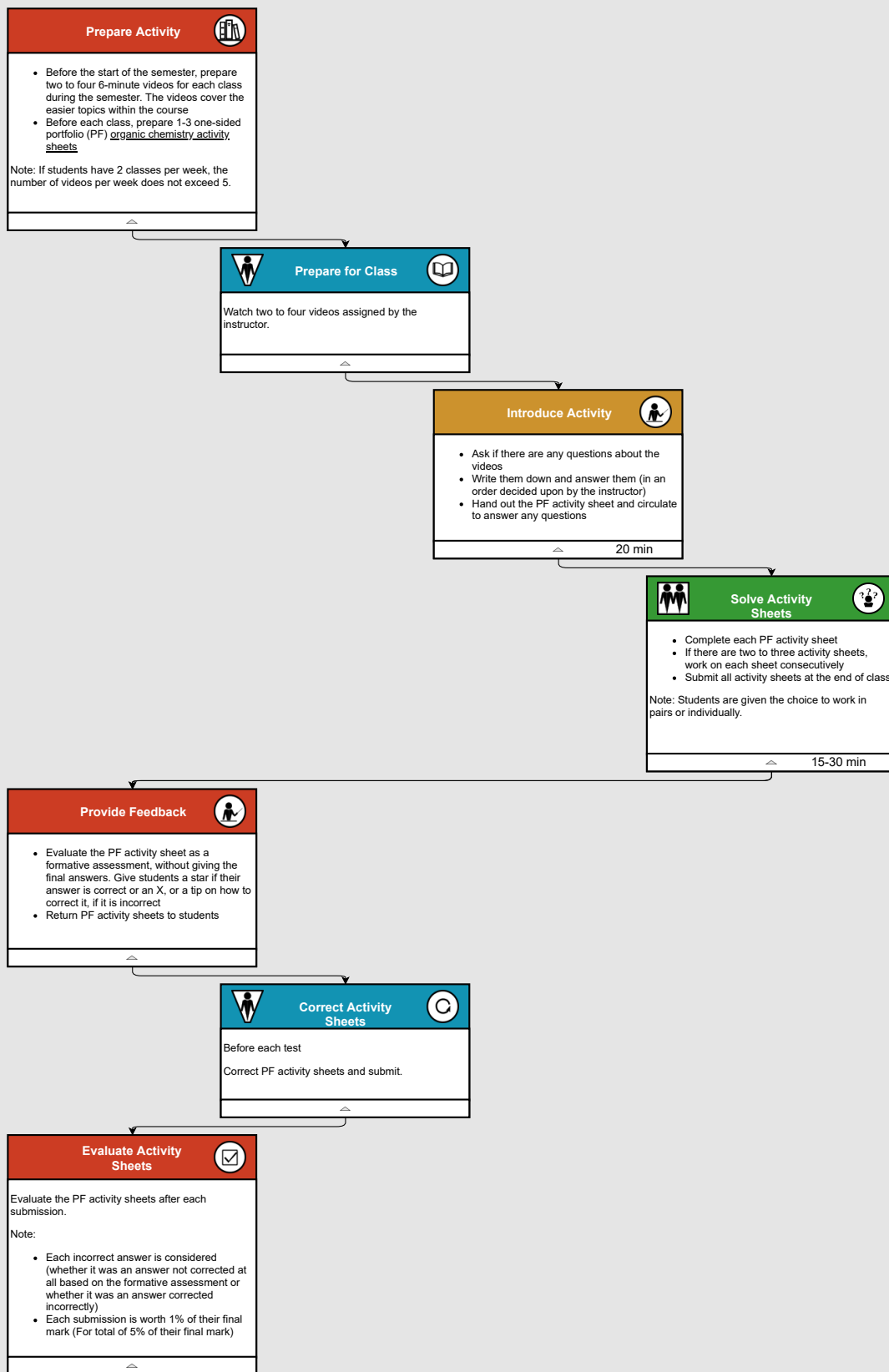


In Class (Instructor)



In Class (Students)

Part 1



## Legend

### Context Icons:



Individual Work



Work in Groups

### Task Icons:



Problem Solve



Create/Design



Revise/Improve



Read



Instructor Resource Curati



Instructor Orchestration



Instructor Evaluation

**Produce an Activity Sheet**

Collect PF activity sheets and include them in a portfolio.

Note: At the end of the semester, the portfolio will contain all of the organic chemistry exercises completed throughout the semester. For example, if there were 5 exams, there will be 5 sets of PF activity sheets.

Repeat throughout the semester

**Prepare Activity**

- Before the start of the semester, prepare two to four 6-minute videos for each class during the semester. The videos cover the easier topics within the course
- Before each class, prepare 1-3 one-sided portfolio (PF) organic chemistry activity sheets

Note: If students have 2 classes per week, the number of videos per week does not exceed 5.

**Prepare for Class**

Watch two to four videos assigned by the instructor.

**Introduce Activity**

- Ask if there are any questions about the videos
- Write them down and answer them (in an order decided upon by the instructor)
- Hand out the PF activity sheet and circulate to answer any questions

20 min

**Solve Activity Sheets**

- Complete each PF activity sheet
- If there are two to three activity sheets, work on each sheet consecutively
- Submit all activity sheets at the end of class

Note: Students are given the choice to work in

15-30 min

**Provide Feedback**

- Evaluate the PF activity sheet as a formative assessment, without giving the final answers. Give students a star if their answer is correct or an X, or a tip on how to correct it, if it is incorrect
- Return PF activity sheets to students

**Correct Activity Sheets**

Before each test

Correct PF activity sheets and submit.

**Evaluate Activity Sheets**

Evaluate the PF activity sheets after each submission.

Note:

- Each incorrect answer is considered (whether it was an answer not corrected at all based on the formative assessment or whether it was an answer corrected incorrectly)
- Each submission is worth 1% of their final mark (For total of 5% of their final mark)

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