

## 2022 VisChem Institute Application

Tell us who you are.

First Name

Last Name

Preferred Honorific (Ms., Mr.,  
Mx., Dr., etc.)

What pronouns should we use for you?

- She/Her
- He/Him
- They/Them
- Other/Combination (Please write in)

What email address would you like to use for correspondence with the VisChem project team?

What school do you teach at primarily?

We will be collecting demographic data about your school from the NCES database, so it is important that we are able to identify your school by either an accurate address or by your school's NCES School ID.

You can look up your school's NCES School ID or legal address [here](#).

As a reminder, currently the VisChem Institute is only accepting applications from teachers at public US high schools.

School Name

School Street Address

City

State

Zip Code

NCES School ID

As of the start of the 2021-22 school year, how many years of teaching had you completed?

Overall/Across all disciplines

In Chemistry specifically

Please consider your current and near-future teaching assignments, and select your primary teaching discipline.

- Chemistry
- Physics
- Biology
- Earth Science
- Other (please state)

Please estimate the number of students per year that you would expect to teach in each of these types of classes under typical (i.e., non-COVID-19 related) circumstances.

Introductory/General Chemistry

Honors/Advanced (Non-AP) Chemistry (Taken as a second year of chemistry for general students or as a first year for advanced students)

AP Chemistry

IB Chemistry

Dual-Enrollment/College Credit (non-AP) Chemistry

Non-College Preparatory or Remedial Chemistry

Physical Science

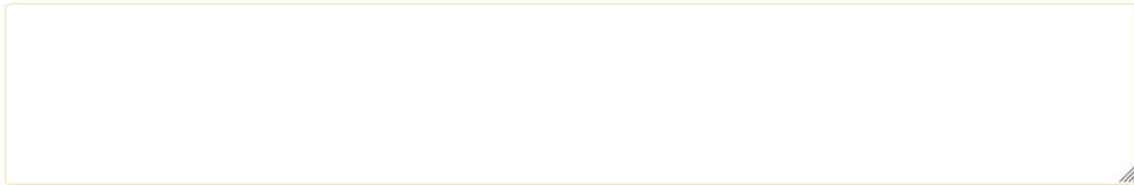
Biological sciences with chemistry focus

Other Chemistry-related courses not listed (Please list course and approx. # of students)

Describe the pedagogical approaches you use in your classroom. Address each of the following questions in your answer.

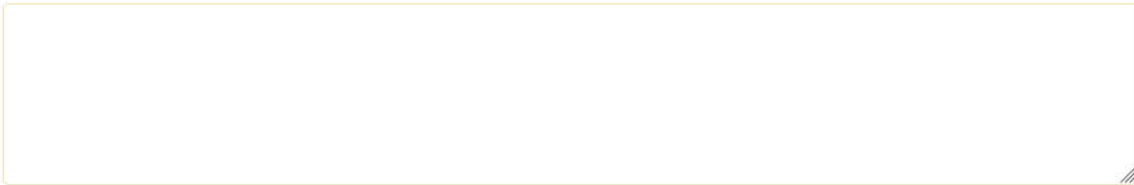
- What does a typical unit, lesson, or cluster of lessons consist of for your students?
- How do students learn new content?
- What kinds and frequency of assessment do you employ?
- What other features of your teaching make you an effective instructor?

(2000 Character Limit, ~500 words)



Consider the following hypothetical scenario: You have just completed an instructional unit on density, and your assessment results show that a majority of students did not perform well. How would you proceed?

(1000 Character Limit, ~250 words)



Please rate the FREQUENCY OF USE and your COMFORT WITH incorporating the following into your lessons and assessments regarding molecular level phenomena.

	Frequency of Use				Comfort		
	Never	Rarely, most units do not include this	Sometimes, many units include this	Frequently, most units include this	Not Comfortable	Somewhat Comfortable	Very Comfortable
Static, hand-drawn or other non-digitally generated visualizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Static, digitally generated visualizations (e.g., textbook images)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dynamic/interactive, non-digitally created visualizations (e.g., molecular model kits)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dynamic, non-interactive, digitally created visualizations (e.g., VisChem animations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive, digitally created visualizations/activities (e.g., PhET simulations)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Describe what you wish to learn at the VisChem Institute.  
(1000 Character Limit, ~250 words)

Participation in the VisChem Institute requires pre-work including you taking an online survey and you administering it to your students. A high response rate is critical to serve the learning goals for teachers at the Institute. The student data are de-identified and will not be used for research purposes; therefore, no informed consent from parents is required. The survey should take students about 30 minutes.

- I agree to complete the pre-work if selected.
- I do not agree to complete the pre-work if selected.

The VisChem Institute is a work-intensive professional development that includes evening readings and homework as well as a few social gatherings during your stay at Miami University. We recognize that the workload (and time-on-task) is markedly different from most professional development offerings. Although the workload improves the efficacy and efficiency of the 4-day PD and subsequent learning outcomes for teachers, we do not wish to overlook sharing this feature of the VisChem Institute with our applicants.

- I understand the high expectations of me and am ready for an intensive learning experience at the VisChem Institute if selected to participate.
- I do not wish to engage with the high expectations of the VisChem institute and wish to withdraw my application from consideration.