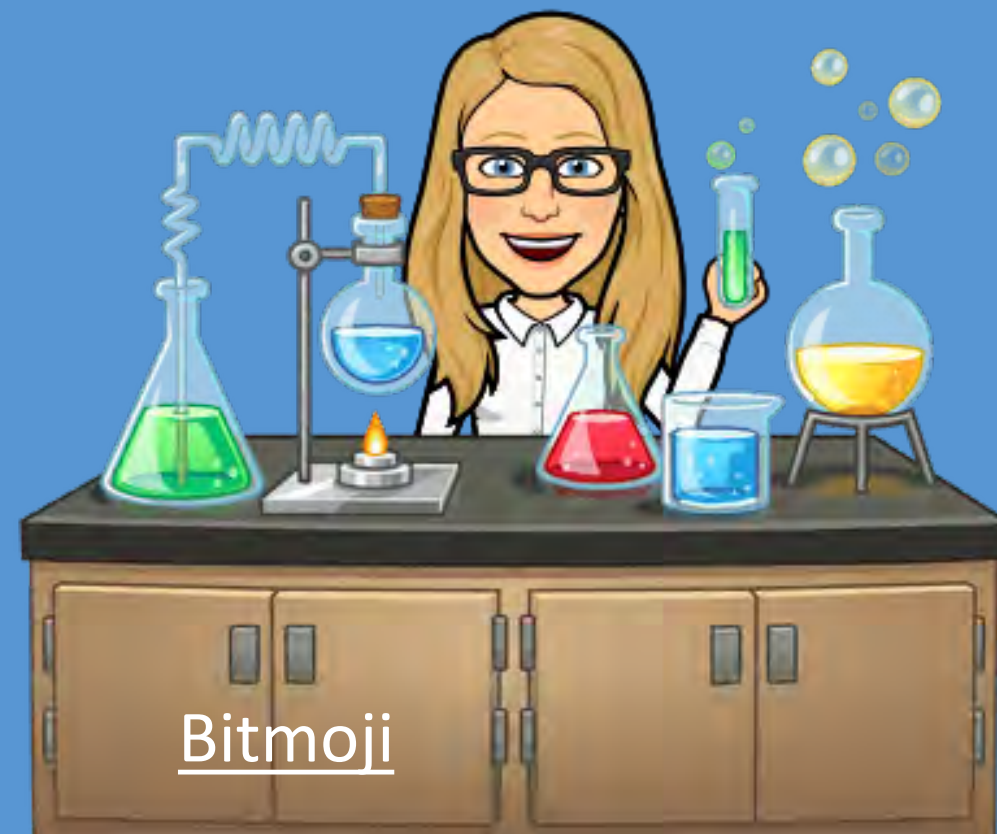


# *Are the students laughing at my jokes?* How to connect and build community in the times of COVID-19

Dr. Laurie S. Starkey  
Cal Poly Pomona



# One Year in: Lessons Learned

- Invest in an iPad (Apple Pencil, Paperlike screen protector)
- Gradescope to manage student work
- Genius Scan to make PDF w/phone
- Use a headset (good mic, mute button)
- Get a good snipping tool (Snagit)
- Create a YouTube channel



# How to: Give Synchronous Exams Remotely

## Distribute exam PDF via email

- Academic integrity pledge (+ WileyPLUS quiz, + build relationship, + guilt-trip “Be the person your dog thinks you are!”)

## Proctor via Zoom (webcams on)

- Lockdown browsers = equity concerns
- Private chat for questions
- Easy to make announcements

## Student submits completed exam to Gradescope

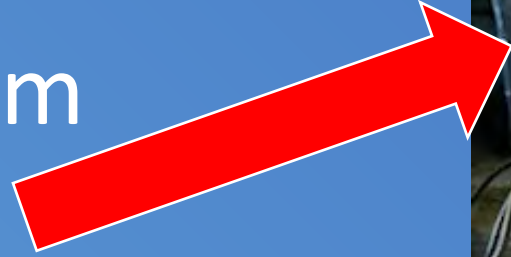
- Student can print, write on exam, Genius Scan to make PDF
- Student can use tablet/iPad to work on PDF directly
- Student can write answers on blank paper, then Genius Scan

# Offer Synchronous Activities (aka Live Show)

- Students can ask questions, provide feedback
- YOU can ask questions, work on problems (flipped classroom)
- Breakout sessions for discussion, problem-solving
- Preferred by students: online overload, getting what you pay for
- Builds community
- ***Disadvantages...***
  - *Minimal student participation (Is anyone laughing at my jokes?)*
  - *Students are reluctant to use video*
  - *Can be exhausting*
  - ***Equity concerns (Always make recordings available!)***

# My Remote Classroom

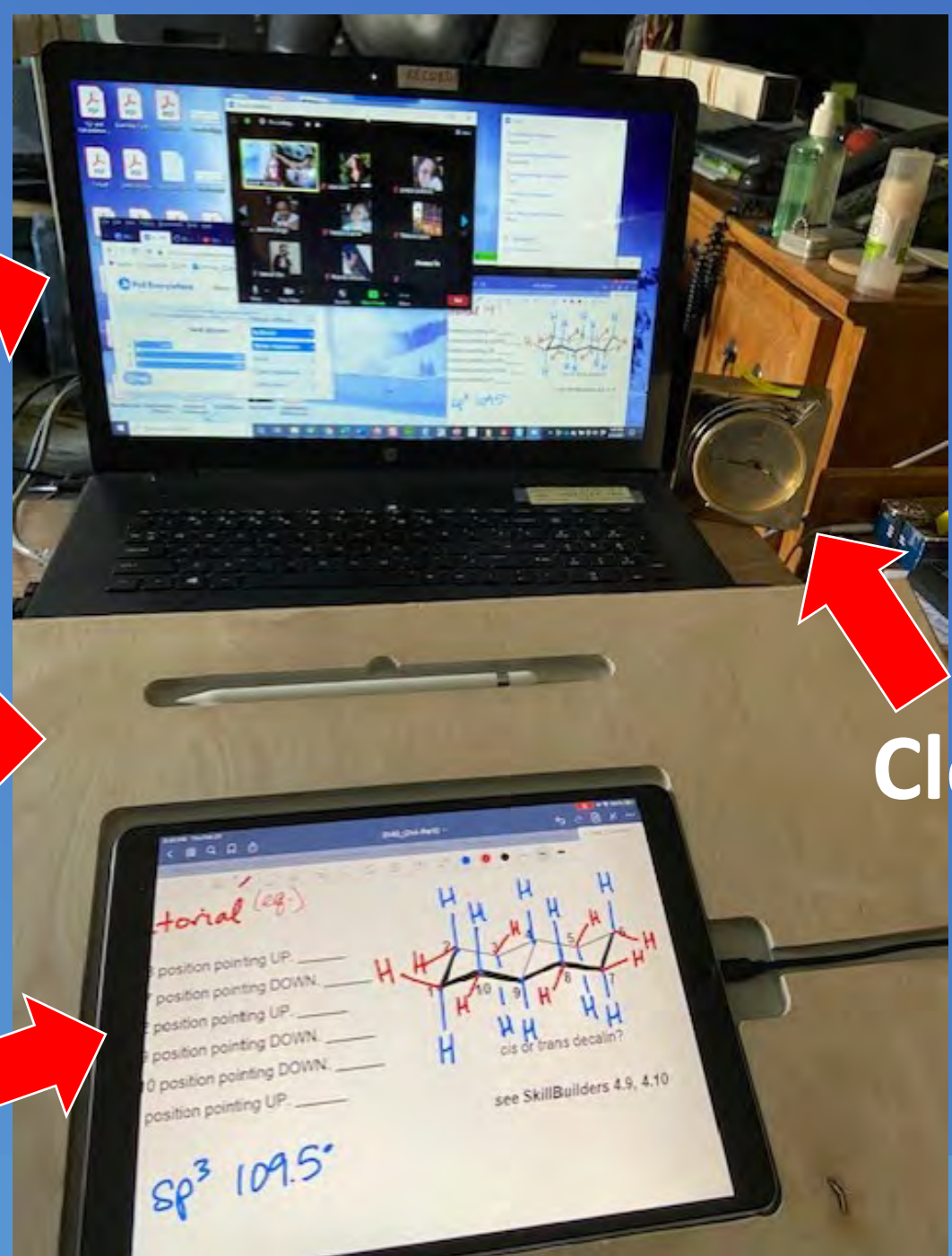
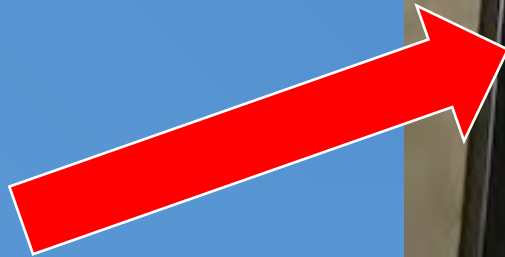
Laptop (Zoom  
& Webcam)



Support Board  
(Ergonomics)



iPad (Zoom  
& GoodNotes)



Clock!

# How to: Teach Synchronously & DRAW Using Zoom

The image shows a Zoom meeting window with several features highlighted by red boxes and arrows:

- Shared iPad screen:** A red box at the top points to the shared screen content.
- Zoom Attendees:** A red box in the center points to the grid of participant video thumbnails.
- Chat Q/A:** A red box on the right points to the chat window.
- Anonymous Polling:** A red box at the bottom left points to the Poll Everywhere interface.
- My Webcam:** A red box at the bottom right points to the host's video thumbnail.

The shared screen displays a chemistry reaction scheme and a poll. The reaction scheme shows a cyclopentanone reacting through two steps to form a tertiary alcohol and then an ester. The poll results are as follows:

Option	Percentage
A	0%
B	11%
C	56%
D	11%
E	22%

# How to: Teach Synchronously & DRAW Using Zoom

- Provide worksheet or skeleton notes as PDF
  - PowerPoint, Word, ChemDraw
  - Hand-written notes cap, tured with **Genius Scan**
- Start Zoom session on laptop for best functionality
  - Webcam for video of me, full keyboard for chat
  - presenter tools easy to find/use
  - Poll Everywhere window
  - can share screen to show LMS/websites/e-Text/online homework
- Join Zoom session with my iPad or phone and share screen
  - Do NOT join audio on iPad (otherwise, echo/feedback!)
  - Phone camera can capture you writing on paper, models, etc.
  - iPad apps to mark-up PDF (solve problems, annotate notes)

# That Awkward Zoom Time Before Class Starts...

- Turn on video so you can make a toast (coffee cup)
- Show live animal cams from [Explore.org](https://www.explore.org/)
- Loop a PowerPoint slideshow with course announcements, memes, student photos

Assignments due ASAP...and first Ch. 18 homework now available!

ACTIVE ASSIGNMENTS	RELEASED
Messy Aldol	OCT 22
Phenol Acidity Homework	OCT 20
Exam Wrapper 2	OCT 21
Exam2 Corrections	OCT 21

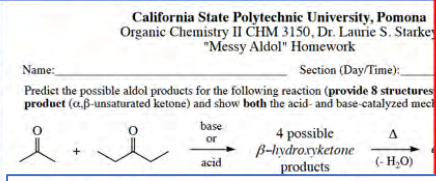
California State Polytechnic University  
Organic Chemistry II CHM 3150, Dr. Laurie S. Starkey  
Compare Acid Strength Homework

Name: \_\_\_\_\_ Section (Day/Time): \_\_\_\_\_

The nitro group (NO<sub>2</sub>) is an electron-withdrawing group (EWG). The pK<sub>a</sub> for para-nitrophenol (B) is 7.1. Use this data to explain the effect of the nitro group on the acidity of phenol. Resonance effects should be considered. Use complete drawings of the nitro group and ALL relevant resonance forms of the conjugate base.

Consider the following guiding questions as you prepare your assignment:

- 1) What do the conjugate bases of these phenols look like?
- 2) Are the nitro groups involved in the resonance of CB-A or CB-B?
- 3) Which conjugate base is more stable? Why?



8	10/12	10/13 Chapter 20	10/14	10/15 Exam II
9	10/19	10/20 Chapter 21	10/21 <b>You are Here</b>	10/22 Chapter 21
10	10/26	10/27 Chapter 21	10/28	10/29 Chapter 21
11	11/2	11/3 VOTE Chapter 17	11/4	11/5 Chapter 17
12	11/9	11/10 Chapter 18	11/11 Holiday	11/12 Chapter 18
13	11/16	11/17 Ch. 22.10, 22.11	11/18	11/19 Chapter
14	11/23	11/24 Exam III	11/25	11/26 Holiday

Today's Topic: Introduction to Aromatic Reactions (Ch. 18)

- See To-Do List in Blackboard Step 2
- Read
  - Watch
  - Practice

Step 2 Ed. Sec. 9

- Watch second half of Educator Section 9 - Aromatic Reactions, Part 1 (0:00 - 38:43)
- Read Klein 18.1, 18.15 Electrophilic Aromatic Substitution (EAS)
- Read Klein 18.7 - 18.11 EAS on Substituted Benzenes
- Work through SkillBuilders 18.1, 18.2, 18.3 (problems 18.14 - 18.20)

III. Electrophilic Aromatic Substitution, EAS (18.1, 18.15)

IV. EAS on substituted benzenes (18.7 - 18.11, SB 18.1, SB 18.2, SB 18.3)

Interesting Phenols: Can You Match the Structure with the Name?

xanthohumol  
hops flavor & protects from Alzheimer's

TetraHydroCannabinidiol  
marijuana component

eugenol  
essential oil in cloves (pumpkin spice)

urushiol  
poison ivy allergy & irritant

Chloraseptic spray  
sthetic/analgesic for sore throats

cannabidiol  
pain-reliever from hemp

The Study Cycle

**Preview** - Preview before class - Skim the chapter, note headings and boldface words, review summaries and chapter objectives, and come up with questions you'd like the lecturer to answer for you.

**Attend** - Attend class - GO TO CLASS! Answer and ask questions and take meaningful notes. \*Engage: clicker, work on problems

**Review** - Review after class - As soon after class as possible, read notes, fill in gaps and note any questions. \*Read the related textbook sections!

**Study** - Study - Repetition is the key. Ask questions such as "why", "how", and "what if". \*Work on in-chapter problems!  
• Intense Study Sessions\* - 3-5 short study sessions per day  
• Weekend Review - Read notes and material from the week to make connections

**Assess** - Assess your Learning - Periodically perform reality checks  
• Am I using study methods that are effective?  
• Do I understand the material enough to teach it to others?

\*Intense Study Sessions

1. Set a Goal (1-2 min)
2. Study with material (30-50 min)
3. Reward Yourself (10-15 min)
4. Review (1 min)

Decide what you want to accomplish in your study session  
Interact with material: organize, concept map, summarize, process, re-read, fill in notes, reflect, etc.  
Take a break: call a friend, play a short game, get a snack  
Go over what you just studied

Effective use of Study Time

The Study Cycle as presented to the Louisiana State Univ. students seeking advice from the Center for Academic Success.  
(\*Notes added by Laurie Starkey)  
Elzbieta Cook; Eugene Kennedy; Sandra Y. McGilvray; J. Chem. Educ. 2013, 90, 963-967.  
DOI: 10.1021/ed500698g Copyright © 2013 The American Chemical Society and Division of Chemical Education, Inc.



# How to: Keep Students Motivated

- Build community/relationships
- Encourage study groups
- Weekly “Friday5” reflection

## Motivate Lab training (GPS)

- Growth Mindset
- Purpose & Relevance
- Sense of Belonging

Travis Maddry

[travis@motivatelab.org](mailto:travis@motivatelab.org)



# Make a Course Introduction Video

- Introduce yourself & your course
- Share your passion
- Starting Strong...
  - Growth Mindset
  - Purpose & Relevance
  - Sense of Belonging
- Include link in Welcome E-mail



[Welcome to Organic Chemistry!](#)

# Padlet.com for Student Introductions

## 👋🏻 Hello everyone!

Hi! My name is Lalal I'm a third year chemistry major and plan to get into environmental or green chemistry. I love everything star wars and Van Gogh. Goodluck to us all this semester :)

# CHM 3150

## 👋🏻 Hello everyone!

Hey everyone! My name is Jonathan, and I'm a second year Biochem major at CPP. I like being outside in the winter, but the summer gets too hot for me so I usually just stay inside. I'm always down to try new things because I just enjoy learning and experiencing as much as I can. This is a pic my gf and I took earlier this year (before quarantine)

## 👋🏻 Hello everyone!

Hello everyone. I am Asijana. I am currently majoring in in Animal Science Pre-Vet option and minoring in zoology. I plan to get my doctorate in wildlife veterinary medicine and save the endangered animals. The picture I have posted are of my turd muffins Asuna and Calvin. I like to watch anime, play video games, paint and hang with my fam bam. I hope we get through this semester together.

## 👋🏻 Hello everyone!

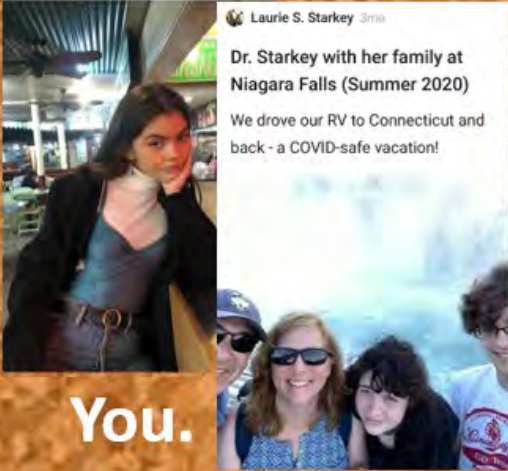
Hello everyone! My name is Diego and I am a 4th year Animal Science/Pre-Vet student. I love to travel, photography, and I also like collection vinyl. This is me in Paris last year :) I hope I can travel again soon. I hope all of you have an amazing semester!



Laurie S. Starkey 3mo

**Dr. Starkey with her family at Niagara Falls (Summer 2020)**

We drove our RV to Connecticut and back - a COVID-safe vacation!



## 👋🏻 Hello everyone!

Hi! This was taken last week in my baby's 2nd birthday. He got into the cake before we could take a decent pic.



## 👋🏻 Hello everyone!

Hello, my name is Nhan I am a senior at Cal Poly. I love hanging out with friends, reading manga, watching anime, and observing nature. Nice to meet you all.



## 👋🏻 Hello everyone!

Hey, I'm Gina and I'm a 4th year chemistry major. Because I love makeup and skincare, it is my goal to become a cosmetic chemist after I graduate. I enjoy watching standup and comedy podcasts. Hmu if you need any recommendations!



# CHM 3150

## 👋🏻 Hello everyone!

Hello, I'm Tram and a third year Chem major. Nice to meet everyone. This is a photo of Mochi that I got from this little shop at Little Tokyo called Fugetsu-Do; and it's really yummy!



## 👋🏻 Hello everyone!

Hi, my name is Jason and this is my vacation to Lake Arrowhead!



## 👋🏻 Hello everyone!

Hello everyone, my name is Noe and I am a chemistry major. This is a picture of my dog Lily who recently passed away this summer.



# You. Belong.

# You. Belong.

# Remote ENGAGEMENT using Kahoot!

Clickers on steroids ...FUN, gameshow -style multiple -choice questions using mobile devices (good for syllabus “quiz,” exam review, “inquisitive ” lab interactivity and more Kahoot )

The image is a collage of Kahoot! interface elements. At the top left, a quiz question asks "How many quizzes and exams are in CHM 201?" with a "Skip" button. Below this is a Kahoot! logo and a "15" in a purple circle. To the right, a quiz question asks "Is grease needed on the ground-glass joint of the round-bottom flask?" with a video of a flask and a red arrow pointing to the joint. Below the video are five multiple-choice options with colored icons: a red triangle, a blue diamond, a yellow circle, a green square, and a white square. At the bottom, there are four colored buttons: a red triangle for "periodic quizzes, 1 midterm, final exam", a blue diamond for "periodic q final exam", a yellow circle for "1 midterm + final exam (no quizzes)", and a green square for "2 midterm quizzes". In the center, there is a Kahoot! game selection screen for "Organic Chemistry (Sn1/Sn2 Substitution Reactions)" with "Classic" and "Team mode" buttons. To the right of this is a mobile app interface showing a "Kahoot!" logo, a "Game PIN" field, and an "Enter" button.

# Study Groups for Student Interactions

- Organic Learning Community (OLC)
- Offer credit for weekly report w/selfie pic

Once you have formed an Organic Learning Community (OLC), please click on "Edit Document/ Edit in Browser" button, select an open box below, and enter the names of your OLC members. OLC #1 has been created as an example.

[See description in course syllabus.](#)

**Want to give your group a name?** Group names are optional and can be added at any time.

**Looking for a group?** Contact members of an existing group or start a group by entering a name in an empty box, or posting a message on Discord. Perhaps you can post about your availability, etc.

**Remember, each OLC group ideally has 3-4 people in it.**

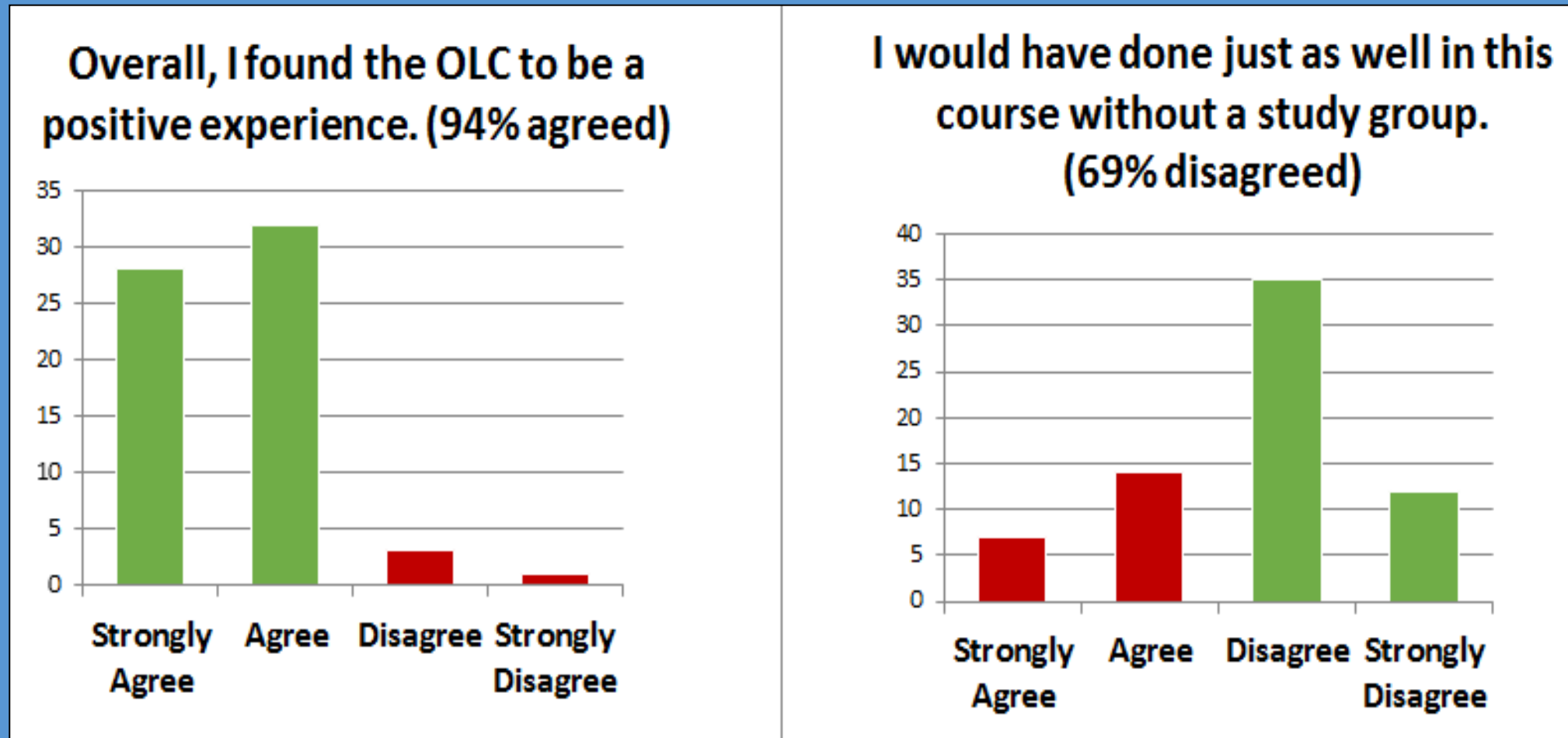
OLC participants will earn **up to 15 points** if they:

1. Meet with OLC for at least one hour each week; AND
2. Record your activities after each meeting (via [Gradescope](#) assignments required to receive full credit); AND
3. Write a final reflection on their OLC experience at the end of the semester.

<p>OLC #1 "Guardians of the O-Chem Galaxy"</p> <p>Dr. Starkey Chris Pratt Wonder Woman Billy Bronco</p>	<p>OLC #2 "Stu-diene"</p> <p>ស្រីស្រស់ស្រាយ វិទ្យាសាស្ត្រ ស្រីស្រស់ស្រាយ</p>	<p>OLC #3 "I'm diene, <u>ឃ្នុ</u>"</p> <p>ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ</p>	<p>OLC #4</p> <p>ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ</p>
<p>OLC #5 "The Survivors"</p> <p>ស្រីស្រស់ស្រាយ</p>	<p>OLC #6</p> <p>ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ</p>	<p>OLC #7</p> <p>ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ</p>	<p>OLC #8</p> <p>ស្រីស្រស់ស្រាយ ស្រីស្រស់ស្រាយ</p>

# Study Groups for Student Interactions

- Organic Learning Community (OLC)
- Students report positive, helpful experience



# OLC Reporting (Gradescope Online Assignment)

OLC report and photo 1



PROBLEM



Insert Images



Insert Field

Who did you get together with? When was the study session, and how did you meet up?

|\_\_\_\_|

What did your OLC work on during the study session?

|\_\_\_\_|

What did you contribute to the session?  
What did you learn?

|\_\_\_\_|

Please upload evidence of your study session (screenshot/photo/notes). Thank you, and have a great week!

|files|







# Fostering Metacognitive Reflection

- Exam Wrappers

- “Friday Five” Reflection

- 1) Describe how you spent your time working on Organic Chemistry this past week.

- 2) Describe your plan for working on Organic Chemistry this coming week.

3<sup>rd</sup> prompt...*promotes Purpose, Relevance, Value*  
*...and it's a wonderful way to connect!*

# “Friday5” Gradescope Online Assignment

Add a  
Zoom  
profile  
picture

QUESTION 1	POINTS	 Delete Question
Reflection	3 	
<b>PROBLEM</b>		 Insert Images  Insert Field
<p>Describe how you spent your time working on Organic Chemistry this past week.</p> <p> ____ </p> <p>Do you know what this weekend is?! It's the weekend before the weekend before Exam I! You know you will be working hard at crunch time NEXT weekend...so what can you do THIS weekend to get caught up (or even a little bit ahead) in order to spread out your workload? Describe your plans for studying Organic Chemistry this weekend and the coming week. Do you have any specific times blocked out for these activities?</p> <p> ____ </p> <p>Battling Zoom fatigue. One thing that makes Zoom more engaging is knowing who is in the meeting or virtual classroom. Your assignment this weekend is to log in to <a href="https://cpp.zoom.us">https://cpp.zoom.us</a> and add a Profile picture! A photo of you would be great, but you can also use an avatar or a pet pic, etc. Upload a screen shot here:</p> <p> files </p>		
 Add Subquestion		
 Add Question 2		

# “Friday 5” to Motivate (GPS) & Make Connections

- Encourage good study habits
- Course Feedback: Start-Stop-Continue
- Mental Health Check-in
- Showing Gratitude
- Finding relevance in Organic Chemistry
- Tell me about your volunteer activities, favorite autumn activities, YouTubers...

# Friday5 Reflections → Pre-Zoom Announcements

## More Interesting Molecules!

Acetaminophen  
(pain reliever)

Prednisone  
(steroid for allergies)

Histamine  
(causes allergies)

Caffeine  
(study aid!)

Taurine  
(essential in feline diet)

Chitin (crab shells & wound treatment)

Whiskey lactone (flavor)

Ascorbic acid (Vitamin C)  
(Antioxidant, COVID-19)

Aminomethyl propanol  
(hair gel)

Steviol  
(sweetener)

Lactic acid  
(muscle pain)

tetrodotoxin  
(product of fish bacteria)

Formaldehyde  
(treat koi pond)

Remdesivir  
(COVID-19)

Diazepam (Valium)  
(treats anxiety, muscle spasm)

Codeine  
(suppress cough)

Bleomycin A2  
(cancer treatment)

Vanillin  
(flavor & fragrance)

docosahexaenoic acid  
(omega 3 fish oil)

Isopropyl alcohol  
(disinfectant)

doxylamine succinate  
(NyQuil)

Beta-carotene  
(antioxidant)

Pantothenic acid  
(vitamin B5, energy)

Psilocybin  
(psychoactive)

LSD  
(hallucinogen)

Gallic acid  
(witch hazel)

Erythritol  
(sweetener)

Valaciclovir  
(herpes med)

# Friday5 Reflections → Pre-Zoom Announcements

## Focusing on Mental Health



# Will students participate? Yes, if rewarded!

Advice: to discourage online cheating, avoid high-stakes exams.  
Result: complete revision of pre-COVID grading scheme!

## F2F Course Points (500)

- \* 3 midterms (300 points)
- \* final exam (200 points)

*Homework, exam*

*wrapper, OLC worth ~5*

*points XC on each exam*

## Remote Course Points (500)

- \* 3 midterms, drop lowest (200 points)
- \* 1 final exam (100 points)
- \* Homework (125 points, 25%)
- \* Reflection/OLC (75 points, 15%)

*Friday Fives, OLC, exam wrappers*

# I am grateful for the relationships we have built!

Professor Starkey,

I know you are a cat mom so I thought I would share this photo of my kitten! I found her with my chemistry flashcards one morning in her favorite box. Not sure how she was able to pull that off. Hope you enjoyed



# Making it Work: Staying Happy, Healthy & Sane

Be Flexible

Be Open to Try  
New Things

Be Patient

Be Honest  
with Students

Don't Reinvent  
the Wheel

Find the  
Silver Linings

Don't Obsess  
Over Cheating

Connect with  
Colleagues

Don't Try to be  
a Superhero

Use Facebook  
Groups

**#AllinThisTogether**



Thank you for joining me today!

Questions?  
Use chat or email me...

[lsstarkey@cpp.edu](mailto:lsstarkey@cpp.edu)

<http://www.cpp.edu/~lsstarkey>



[Mindset & Video  
resources](#)



[COVID-19 remote  
teaching resources](#)