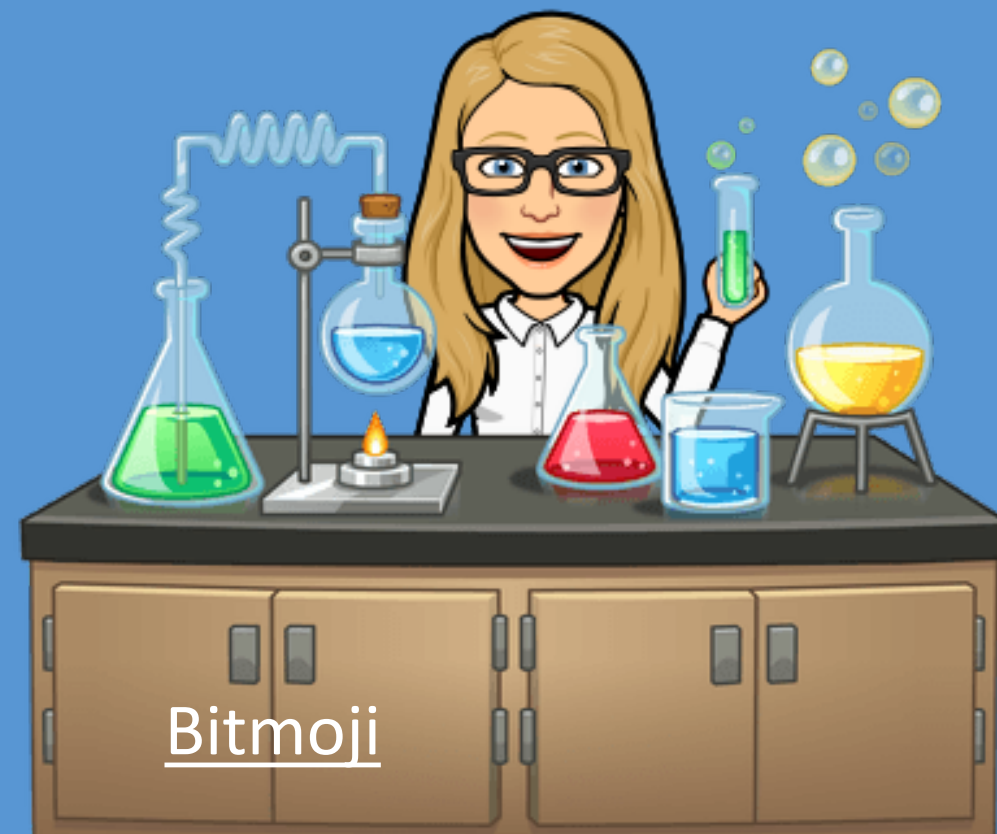


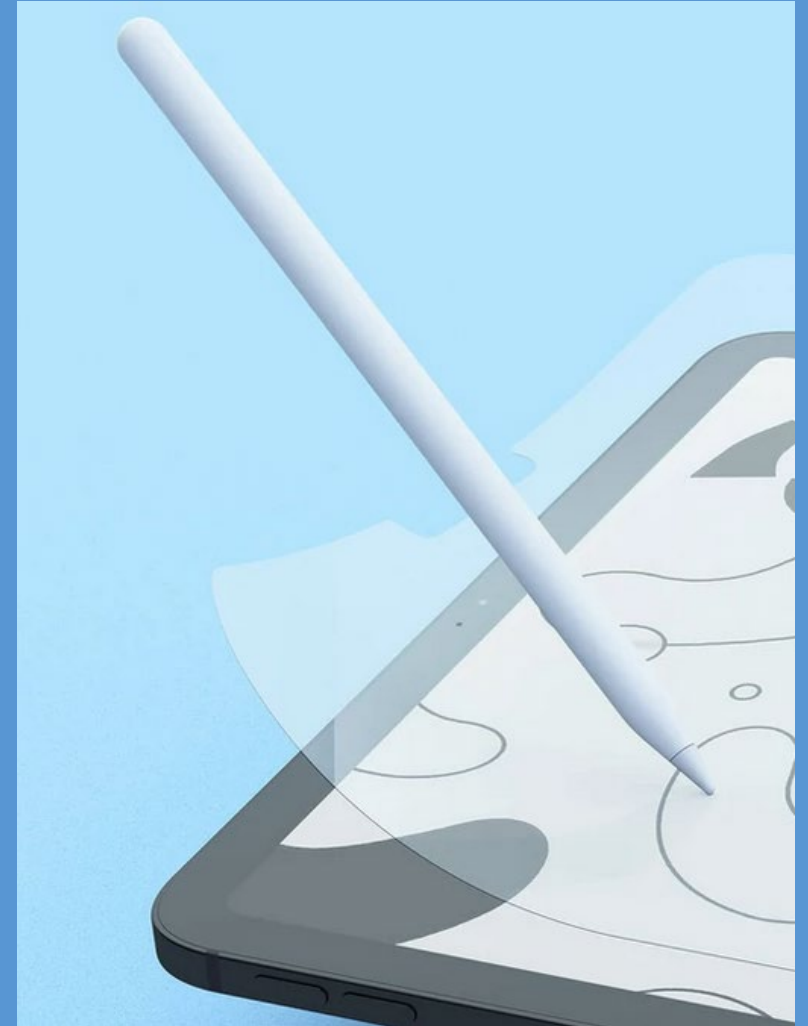
Are the students laughing at my jokes? How to connect and build community in the times of COVID-19

Dr. Laurie S. Starkey
Cal Poly Pomona



Ten Weeks 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



Teaching an Old Dog New Tricks

- I studied Organic Chemistry, now I teach Organic Chemistry
- Gradual introduction to...
 - Bloom's Taxonomy *of the Affective Domain*
 - Growth Mindset and Metacognition
 - Productive Persistence
 - Engagement and Equity...

THANK YOU to

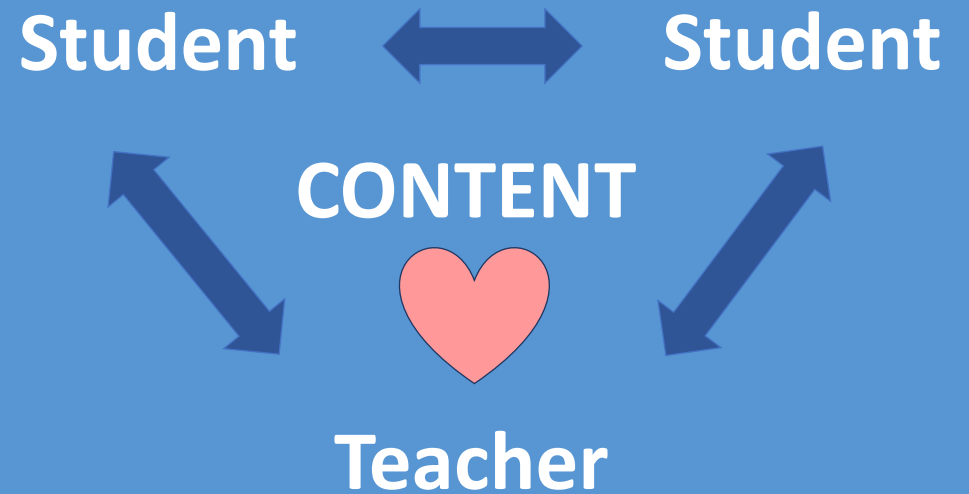
- CPP Center for the Advancement of Faculty Excellence
(Victoria Bhavsar, Peggy Perry, Carol Holder)
- CSU Course Redesign with Technology program (2015-18)

If Students aren't Motivated, All is Lost...

Motivate Lab training

- Starting Strong course
 - Growth Mindset
 - Purpose & Relevance
 - Sense of Belonging

Deep, sustained learning comes from building **relationships**



Travis Maddry

travis@motivatelab.org

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

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

See To-Do List in Blackboard Step 2

- **Read**
- **Watch**
- **Practice**



Step 2

- 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**)

Step 2 Ed. Secn. 9
Reactions, Part 1

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!](#)

Animate Yourself

Bitmoji

Your Personal Emoji



Padlet.com for Student Introductions

Constance (Lala) Kintan

Hi! My name is Lala! 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

Jonathan (Jonathan) Kintan

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 quarentine)

Asijana (Asijana) Kintan

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.

Diego (Diego) Kintan

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!



You. Belong.

၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ် and my mob of boys

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



၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ်

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



၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ်

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

၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ်

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



၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ်

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!



၂၀၂၀/၂၀၂၁ ခုနှစ် နှစ်ပတ်ပတ်

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.

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.

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 new group by entering a name in an empty box, or posting a message on Discord. Perhaps you can talk 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:

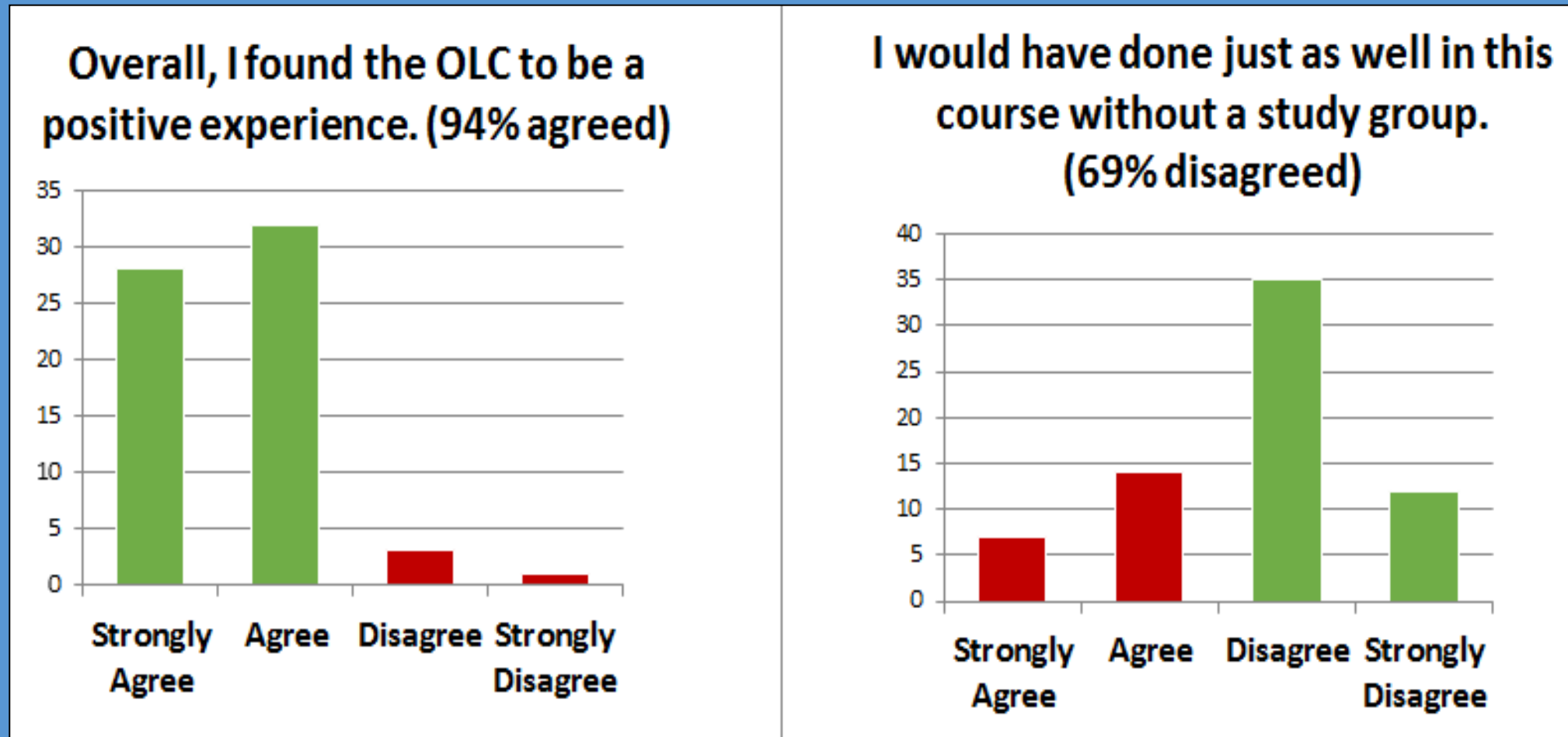
1. Meet with OLC for at least one hour each week; AND
2. Record your activities after each meeting (via Gradescope assignments required to receive full credit); AND
3. Write a final reflection on their OLC experience at the end of the semester.

See description in course syllabus.

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

Study Groups for Student Interactions

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



OLC Reporting

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?

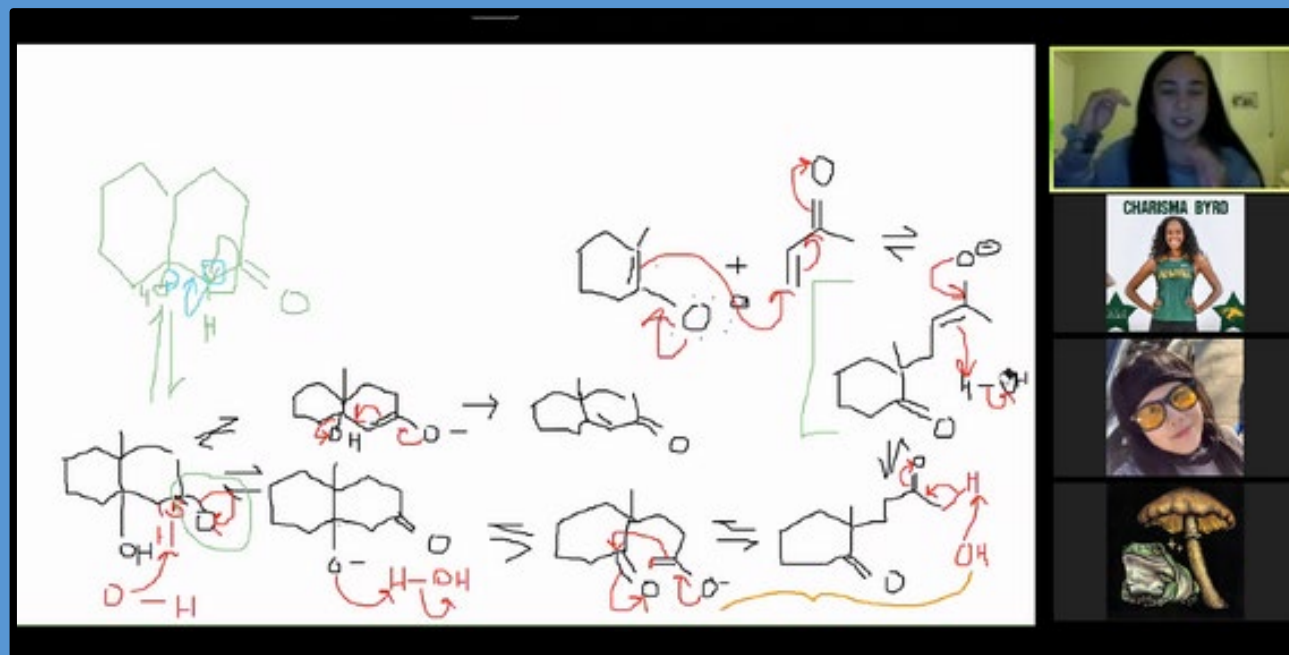
|____|

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

|____|

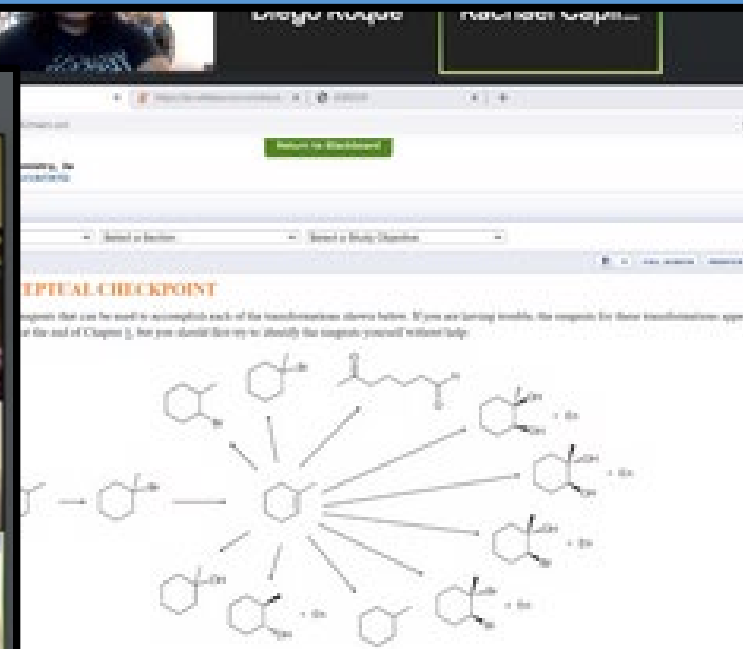
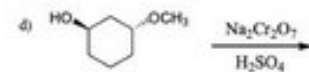
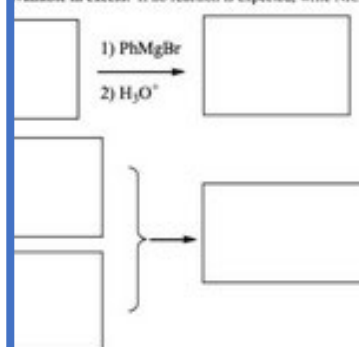
Please upload evidence of your study session (screenshot/photo/notes). Thank you, and have a great week!

|files|



Exam 1
Page 2 of 6

ed (or provide the missing reactant) for each of the cochemistry, when appropriate. Unless otherwise available in excess. If no reaction is expected, write NR.

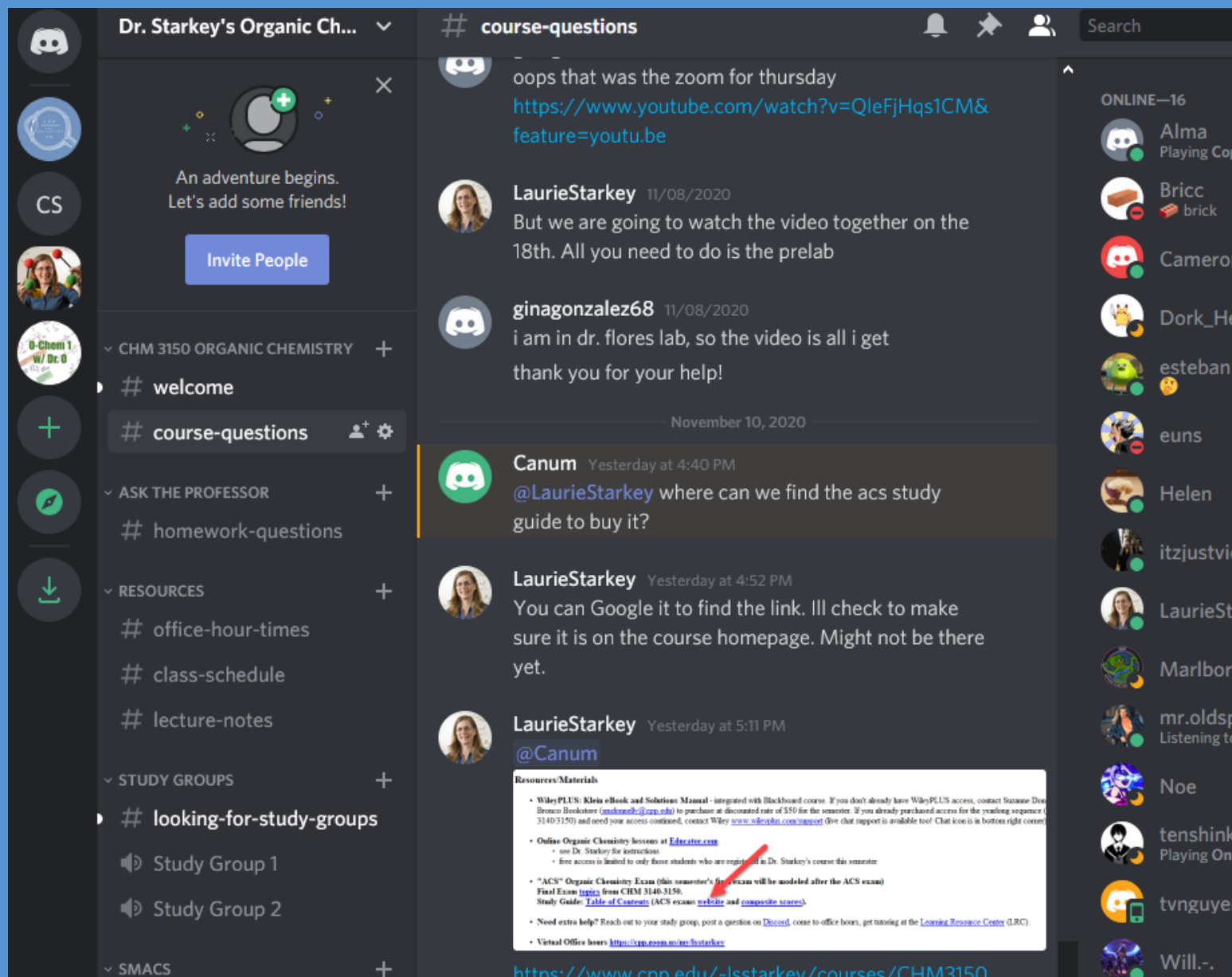


Fostering Communication

- Discussion boards
- Google Voice (texting)
- Discord server
 - instructor/student Q&A posts
 - student/student
 - Familiar to gamers



<https://discord.gg/m6gQWE>

The screenshot displays a Discord server interface. On the left is a sidebar with a search bar, a list of channels including 'CHM 3150 ORGANIC CHEMISTRY', 'welcome', 'course-questions', 'ASK THE PROFESSOR', 'homework-questions', 'RESOURCES', 'office-hour-times', 'class-schedule', 'lecture-notes', 'STUDY GROUPS', 'looking-for-study-groups', 'Study Group 1', 'Study Group 2', and 'SMACS', and a list of server members. The main window shows the 'course-questions' channel. It contains messages from 'oops that was the zoom for thursday' with a YouTube link, 'LaurieStarkey' (dated 11/08/2020) about a video, 'ginagonzalez68' (dated 11/08/2020) about a video, and 'Canum' (dated Yesterday at 4:40 PM) asking for an ACS study guide. Below these is a pinned message from 'LaurieStarkey' (dated Yesterday at 4:52 PM) about finding a link, and another from 'LaurieStarkey' (dated Yesterday at 5:11 PM) mentioning '@Canum'. At the bottom, there is a 'Resources/Materials' section with links to 'WileyPLUS', 'Online Organic Chemistry lessons at Educator.com', 'ACS Organic Chemistry Exam', and 'Need extra help?'. The server name 'Dr. Starkey's Organic Ch...' is visible at the top left of the main window.

Fostering Metacognitive Reflection

- Exam Wrappers
- “Friday Five” Weekly 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.

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

“Friday 5” to Motivate & Make Connections

Add a Zoom profile picture

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 <https://cpp.zoom.us> 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:**

“Friday 5” to Motivate & Make Connections

Course Check-in: Start-Stop-Continue

How is CHM 3150 going so far? We all had SO much to navigate at the start of the semester, but hopefully you are finding your groove and falling into some sort of new-normal routine. **Do you have any feedback for me?** Is there anything you wish I would do differently, or stop altogether? Anything that is working well that you want me to continue? Please share!

“Friday 5” to Motivate & Make Connections

Mental Health Check-in

This year our nation reflects on the events of 9/11/2001, at a time when we are facing another great upheaval - coming from several directions at once. **There is no question your life has been disrupted in many ways since March.** Like 9/11, the year 2020 will certainly go down in the history books, and hopefully what will be commemorated when we reflect on this time is our resilience and the triumph of science and a monumental shift toward a more tolerant and compassionate society. **How are you doing?** Have you developed some positive coping strategies as you adjust to the new normal?

“Friday 5” to Motivate & Make Connections

Showing gratitude

It is a Thanksgiving tradition to reflect on what we are thankful for. Going around the table and taking turns to express our gratitude is a wonderful exercise that can bring us all together. Wouldn't it be nice to do that throughout the year? In fact, the practice of frequently focusing your attention on the positive aspects of life, can have a tremendous impact on your mental well-being and even your physical health! ([Want scientific evidence?](#)) Why not start a **gratitude journal**, or start sticking Post-It notes on a gratitude wall? Here is a [website](#) with many great ideas ([here are the 13 most popular](#)). There are even [gratitude apps](#) you can get for your phone! In the space below, write a thank-you note to someone, deeply reflect on something that made you smile recently, or describe in detail five things you love about your favorite place/friend/pet/food/hobby/season/music... For more ideas, Google “**Gratitude Prompts.**”

“Friday 5” to Motivate & Make Connections

Encourage good study habits

Hopefully you have started making flash cards, as a simple way to stay organized and practice synthesis problems. Please upload a picture of your stack (or pile) of flash cards! If you haven't made any yet, you can upload a picture of whatever method you use to ACTIVELY review material. (BTW, making flashcards now would be a great way to review for the midterm. It's never too late to start making your stack!)

Flash Cards!



“Friday 5” to Motivate & Make Connections

Autumn activities?

Happy October! Do you have any activities you enjoy each fall? Watching sports? Going for walks? Putting up Halloween decorations? I am excited for NFL football to be starting, but I am sad that I won't be going to the LA County Fair this year. **Share a bit about your favorite activities**, and what you are looking forward to in October (perhaps starting some new traditions?).

Your Autumn Activities

Pumpkin
drinks

Dressing
up for
Halloween

Birthdays

Studying
O-Chem

Waiting
for
cooler
weather

LA Fair
Memories

Day of the
Dead

Gardening

Go
Lakers!

Autumn
Decorations

Mid-Autumn
Festival

Spending
time
Outdoors

Carving
Pumpkins

Big Bear

Gaming

Pumpkin
Patch

Missing
Halloween
Horror Nights

National
Chinese
Day

Scary
Movies

NFL
Soccer
Baseball
MMA

Baking

Painting

“Friday 5” to Motivate & Make Connections

Tell me about your volunteer activities

A way to find purpose in life is to do something for others.

Volunteer work contributes to the community and enriches our own lives at the same time! It might be harder to find ways to serve during the pandemic, but since March I have volunteered at a food bank, read to a kindergarten class via Zoom, and donated blood.

My daughter spent two years in high school as a "cat socializer" at an adoption facility in a pet store! Tell me about your volunteer activities - **something you've enjoyed doing in the past, or what you're currently doing, or perhaps what you'd like to do someday.**

“Friday 5” to Motivate & Make Connections

Finding relevance in Organic Chemistry

One thing that makes this course relevant to your life is that you interact with organic compounds all day, every day! Your mission for this Friday Five is to **find an interesting organic molecule**. Upload a picture, tell me its name and write a few sentences about it (What functional group(s) are in it? Where does it come from? Is it natural or man-made? What is it used for? What makes it interesting?) Try **exploring at the ACS "Molecule of the Week" archive**. Can you find a molecule that starts with the same letter as your first or last name? Can you find a molecule that is a ketone, aldehyde, carboxylic acid or carboxylic acid derivative? <https://www.acs.org/content/acs/en/molecule-of-the-week/archive.html>

More Interesting Molecules!

Acetaminophen
(pain reliever)

Prednisone
(steroid for
allergies)

Histamine
(causes
allergies)

Caffeine
(study aid!)

Aminomethyl
propanol
(hair gel)

Taurine
(essential in
feline diet)

Chitin (crab shells &
wound treatment)

Whiskey
lactone (flavor)

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

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)

“Friday 5” to Motivate & Make Connections

Sharing a love of science

Let's celebrate **National Chemistry Week**! Every year the CPP chemistry club (SMACS) conducts science demonstrations at the Santa Ana Zoo for NCW. There was no live event this year, but there are lots of online materials assembled by the American Chemical Society (ACS). Please **explore the ACS NCW website** and reflect on what you find there.

<https://www.acs.org/content/acs/en/education/outreach/ncw.html>

Some possible responses: What was your favorite demo/activity/article/etc.? Do you recall any fun or interesting demos you saw when you were younger? Have you ever watched **Bill Nye** (aka The Science Guy)? Have you ever shared science activities with kids? **Is there something at the ACS website you could share with a younger sibling, neighborhood kids, or local school?** Science is fun!

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 (400)

- * 3 midterms (300 points)
- * final exam (100 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

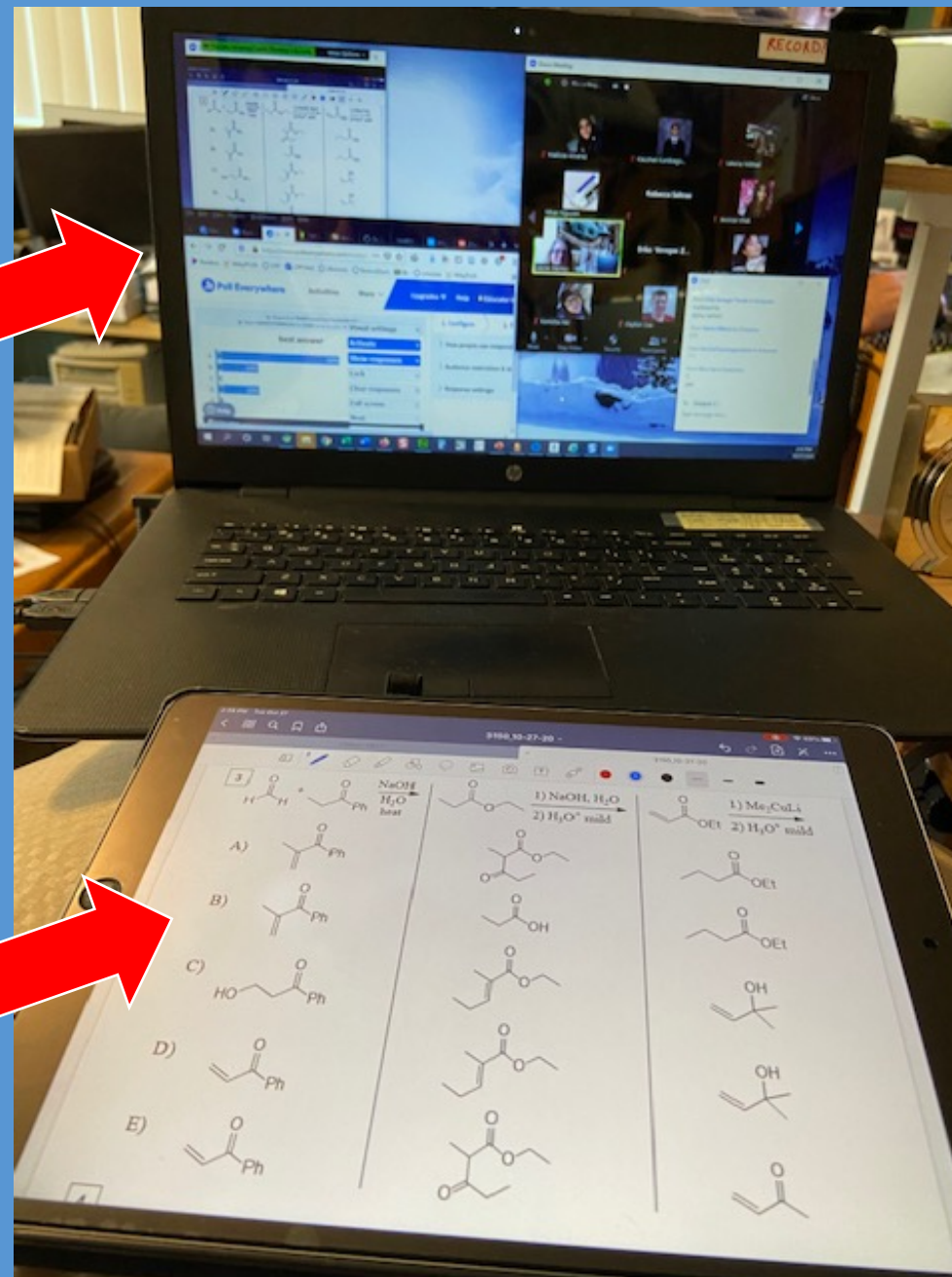
Offer Synchronous Activities (aka Live Show)

- Students can ask questions, provide feedback
- YOU can ask questions
- 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 Online Classroom

Laptop
(Zoom &
Webcam)

iPad (Zoom
& GoodNotes)



Clock!

How to: Teach Synchronously & DRAW Using Zoom

The screenshot shows a Zoom meeting window with several overlapping windows and annotations. Red arrows point to the following features:

- Shared iPad screen:** Points to the top toolbar of the shared screen window.
- Zoom Attendees:** Points to the grid of participant video thumbnails.
- Chat Q/A:** Points to the chat window on the right side.
- Anonymous Polling:** Points to the bottom toolbar where the poll icon is located.
- My Webcam:** Points to the video thumbnail of the host, Laurie Starkey, in the attendees grid.

The shared screen displays a chemistry reaction scheme and a poll results window.

Chemical Reaction Scheme:

Reaction 1: C1CCCC1=O (Cyclopentanone) $\xrightarrow{\text{Step 1}}$ CC1(O)CCCC1 (1-Ethylcyclopentanol) $\xrightarrow{\text{Step 2}}$ CC(=O)OC1CCCC1 (1-Ethylcyclopentanecarboxylate)

Reagents:

- I. 1) EtNa; 2) H₃O⁺; 3) AcCl, pyridine
- II. 1) EtLi; 2) H₃O⁺; 3) AcCl, pyridine
- III. 1) EtMgBr; 2) H₃O⁺; 3) AcOH, pyridine

Poll Results (Poll Everywhere):

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

Visual settings:

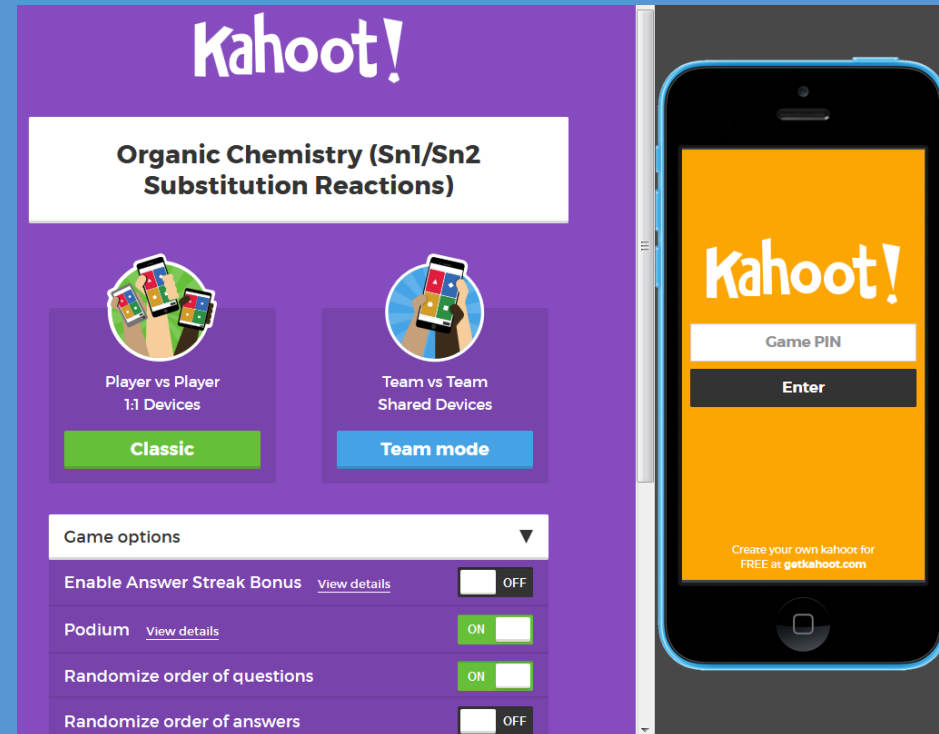
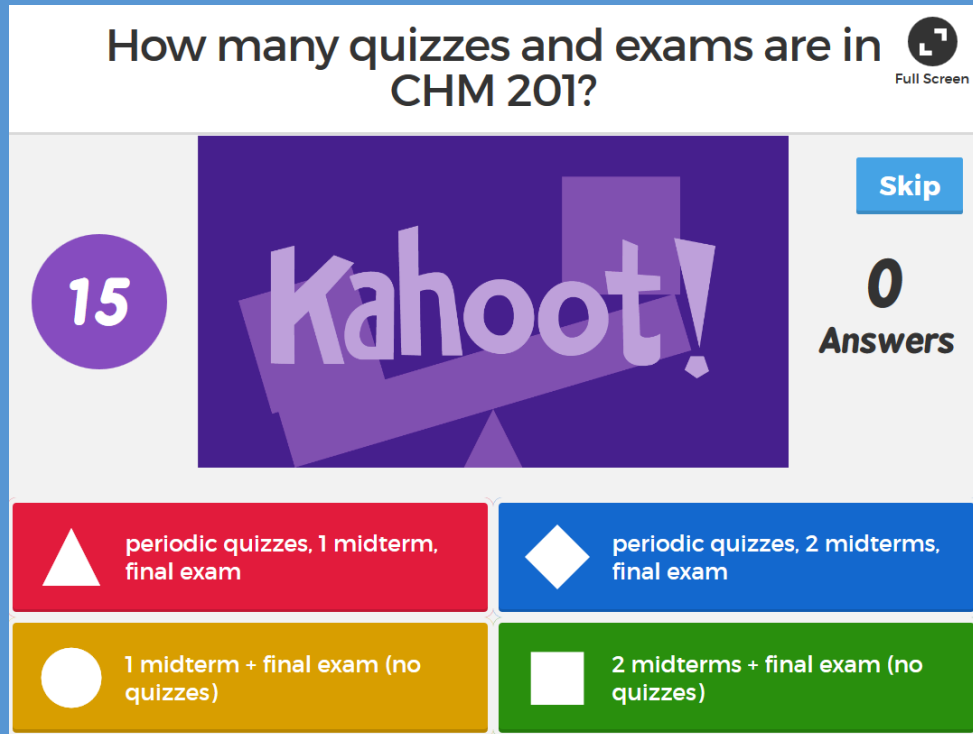
- Activate
- Show responses
- Lock
- Clear responses
- Full screen
- Next
- Previous

How to: Teach Synchronously & DRAW Using Zoom

- Provide worksheet or skeleton notes as PDF
 - ChemDraw, PowerPoint, Word
 - Hand-written notes captured 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
 - can share screen to show LMS/websites/VitalSource text
- 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
 - iPad apps to mark-up PDF (solve problems, annotate notes)

Tech-Enabled 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)



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 Patient

Be Open to Try
New Things

Be Honest
with Students

Don't Reinvent
the Wheel

Don't Obsess
Over Cheating

Don't Try to be
a Superhero

Connect with
Colleagues

Use Facebook
Groups

#AllInThisTogether

Thank you for joining me today!

Questions? Use chat or raise
hand or email me...

lsstarkey@cpp.edu

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



[Mindset & Video
resources](#)



[COVID-19 remote
teaching resources](#)