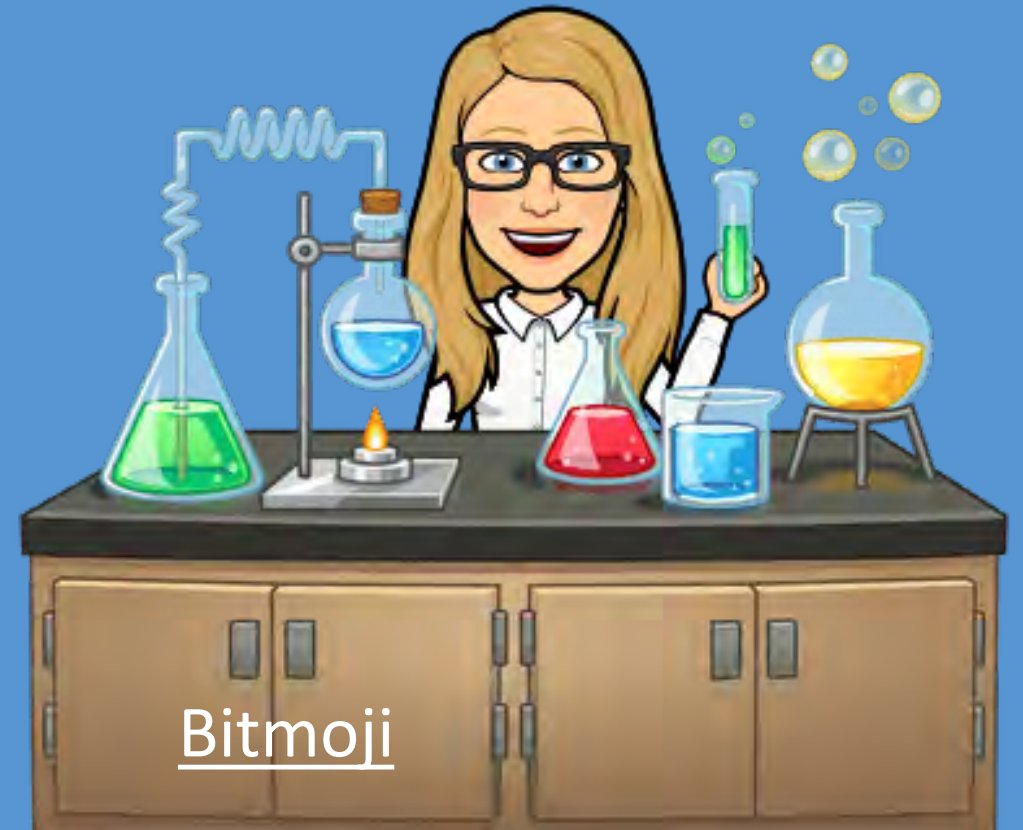


Are the students laughing at my jokes? How to connect and build community in the times of COVID-19

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)

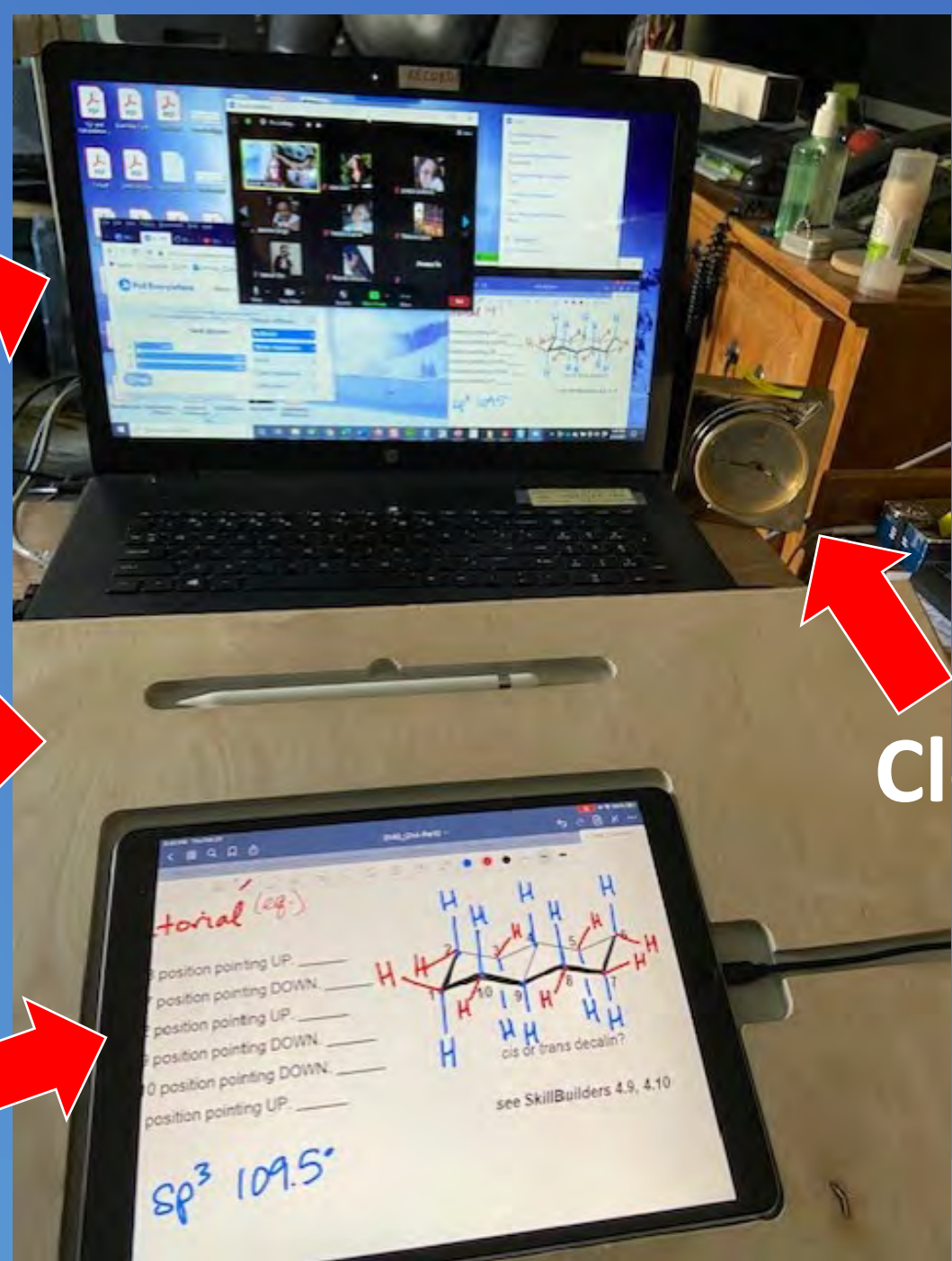
- Students can ask questions, provide feedback
- YOU can ask questions, work on problems (flipped classroom)
- Breakout sessions for discussion, problem-solving
- Preferred by students: online overload, getting what you pay for
- Builds community
- ***Disadvantages...***
 - *Minimal student participation (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)



How to: Teach Synchronously & DRAW Using Zoom

The image shows a Zoom meeting window with several annotations and a poll. The main window displays a shared iPad screen showing a chemical reaction scheme and a poll. The poll is titled "best answer" and shows the following results:

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

The poll is titled "best answer" and shows the following results:

Annotations include:

- Shared iPad screen**: Points to the top of the shared screen.
- Zoom Attendees**: Points to the grid of participant video feeds.
- Chat Q/A**: Points to the chat window on the right.
- Anonymous Polling**: Points to the poll results.
- My Webcam**: Points to the participant's own video feed.

The shared screen displays a chemical reaction scheme and a poll. The reaction scheme shows a cyclopentanone reacting with EtNa and H_3O^+ to form a cyclopentanol, which then reacts with AcCl and pyridine to form an ester. The poll is titled "best answer" and shows the following results:

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
 - 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. La
Compare Acid Strength Home

Name: _____ Section (day): _____

The nitro group (NO_2) is an electron-withdrawing group (EWG). The $\text{p}K_a$ 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 answer:

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

California State Polytechnic University, Pomona
Organic Chemistry II CHM 3150, Dr. Laurie S. Starkey
"Messy Aldol" Homework

Name: _____ Section (Day/Time): _____

Predict the possible aldol products for the following reaction (provide 8 structures product (α,β -unsaturated ketone) and show both the acid- and base-catalyzed mechanism).

CC(=O)CC + CC(=O)CC >> CC(=O)CC(C)CC(=O)CC + CC(=O)CC(C)CC(=O)CC + CC(=O)CC(C)CC(=O)CC + CC(=O)CC(C)CC(=O)CC

4 possible β -hydroxyketone products $\xrightarrow{\Delta} (-\text{H}_2\text{O})$

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

See To-Do List in Blackboard Step 2

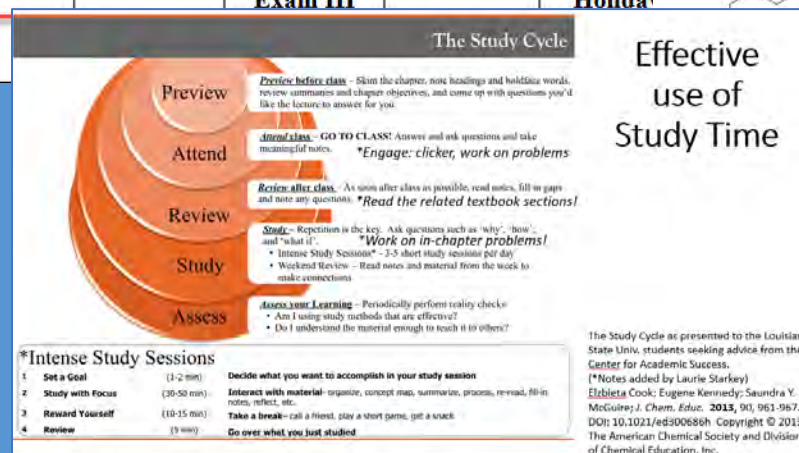
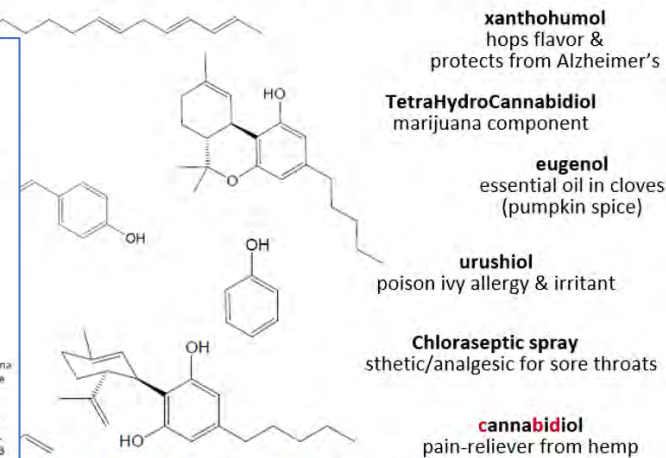
- Read
- Watch
- Practice

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

- 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)

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



[g/content/acs/en/molecule-of-the-week/archive.html](https://pubs.acs.org/content/acs/en/molecule-of-the-week/archive.html)

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



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

Հոգեբանական Ինտրոդուկցիա

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

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.

Ընդհանուր Ընտրություն

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)



Ընդհանուր Ընտրություն

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.



Ընդհանուր Ընտրություն

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!



Ընդհանուր Ընտրություն 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.



Ընդհանուր Ընտրություն

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.



Ընդհանուր Ընտրություն

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

Ընդհանուր Ընտրություն

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!



Ընդհանուր Ընտրություն

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



Ընդհանուր Ընտրություն

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.

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 game mode selection screen for "Organic Chemistry (Sn1/Sn2 Substitution Reactions)" shows "Classic" and "Team mode" options. In the center, a smartphone displays the Kahoot! "Game PIN" entry screen. On the right, a question asks "Is grease needed on the ground-glass joint of the round-bottom flask?" with a video of a flask and four multiple-choice answers: "No, because the system is not under vacuum", "Yes, because otherwise vapors could escape", "No, because the heat would melt it", and "Yes, because it will be a sealed system".

How many quizzes and exams are in CHM 201?

Kahoot!

15

periodic quizzes, 1 midterm, final exam

periodic quizzes, 1 midterm, final exam

1 midterm + final exam (no quizzes)

2 midterm quizzes)

Organic Chemistry (Sn1/Sn2 Substitution Reactions)

Player vs Player 1:1 Devices

Team vs Team Shared Devices

Classic

Team mode

Game options

Enable Answer Streak Bonus [view details](#) OFF

Podium [view details](#) ON

Randomize order of questions ON

Randomize order of answers OFF

2 Is grease needed on the ground-glass joint of the round-bottom flask?

No, because the system is not under vacuum

Yes, because otherwise vapors could escape

No, because the heat would melt it

Yes, because it will be a sealed system

No answer

Kahoot!

Game PIN

Enter

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 discuss 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:

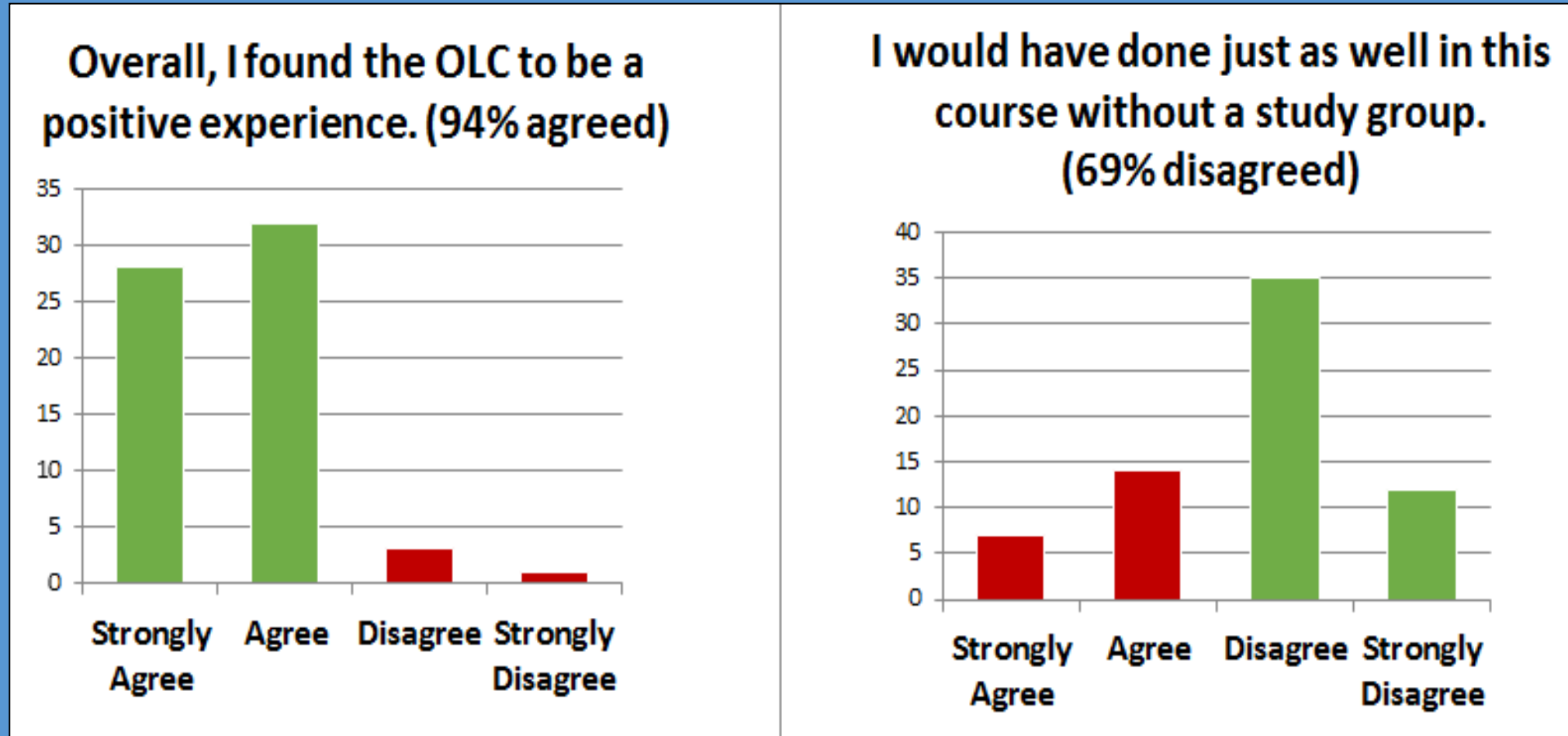
1. Meet with OLC for at least one hour each week; AND
2. Record your activities after each meeting (via Gradescope assignments required to receive full credit); AND
3. Write a final reflection on their OLC experience at the end of the semester.

See description in course syllabus.

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

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|

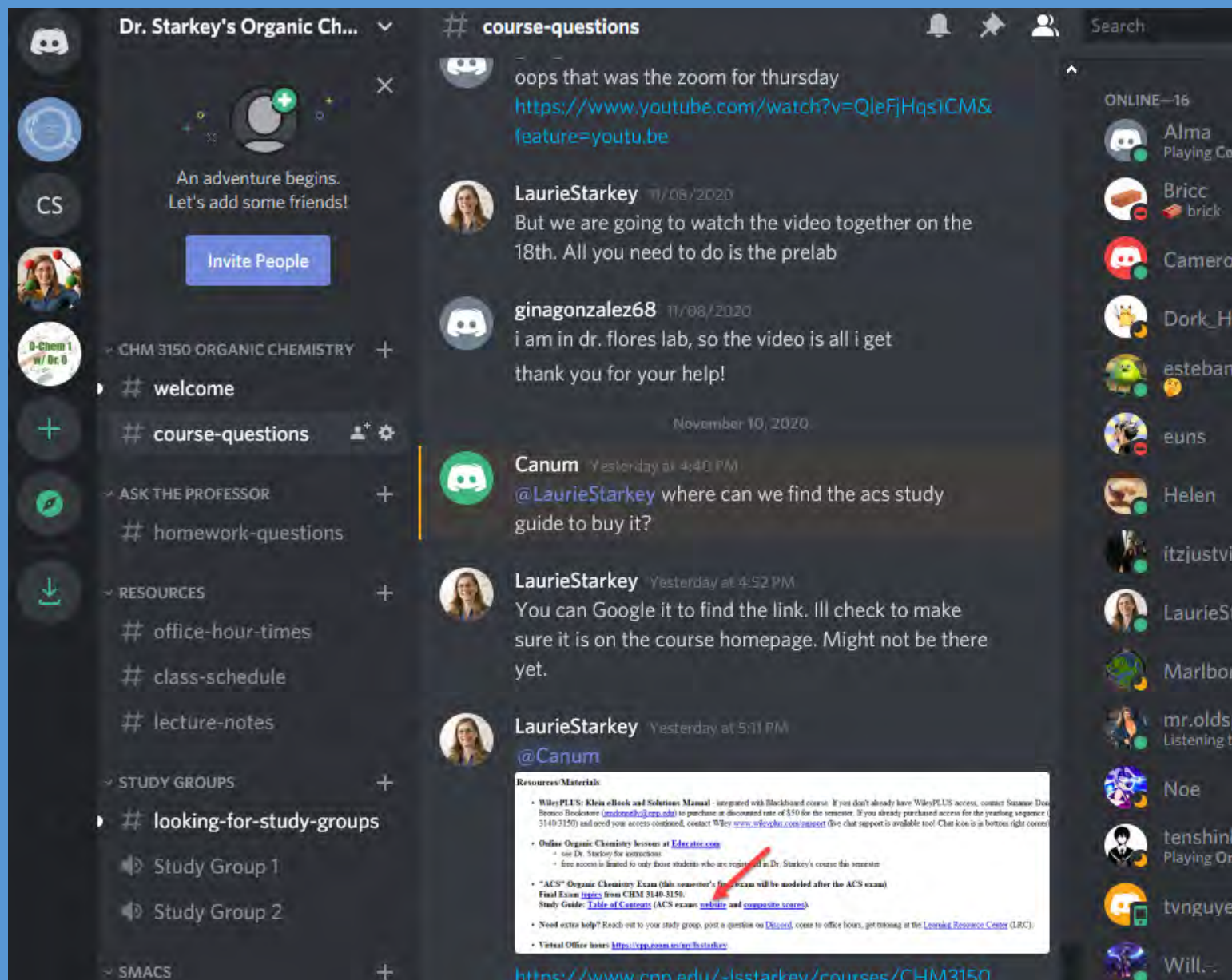


Fostering Communication

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



<https://discord.gg/m6gQWE>



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.

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

“Friday5” Gradescope Online Assignment

Add a
Zoom
profile
picture

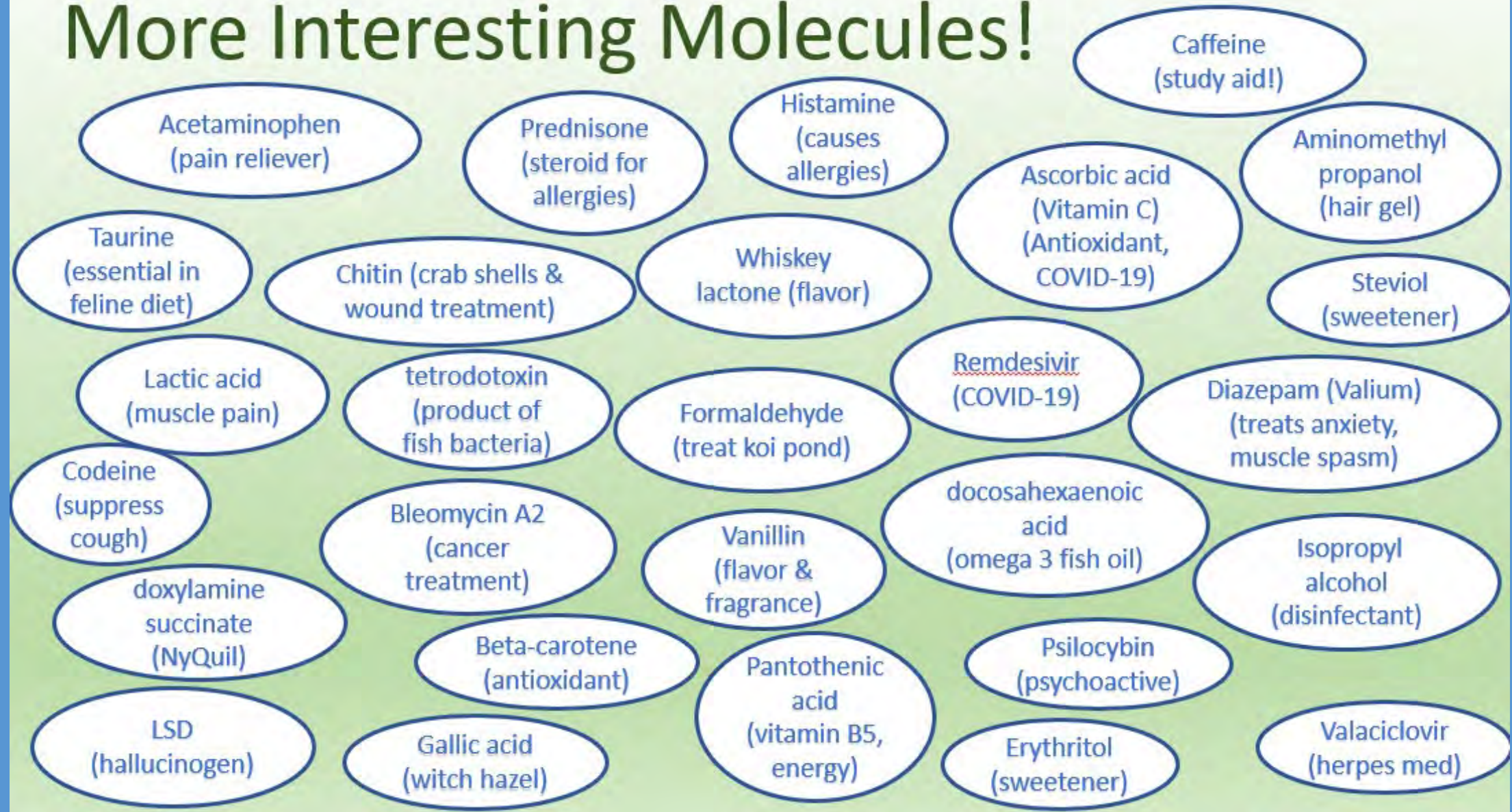
QUESTION 1	POINTS	 Delete Question
Reflection	3 	
PROBLEM  Insert Images  Insert Field		
Describe how you spent your time working on Organic Chemistry this past week. ____ Do you know what this weekend is?! It's the weekend before the weekend before Exam I! You know you will be working hard at crunch 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? ____ 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: files		
 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!



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

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



[Mindset & Video
resources](#)



[COVID-19 remote
teaching resources](#)