Instruc	tor Observed: COL James	Observing Faculty: Dr. Biaglow	
Time:		Course/Subject:	
	9:35-10:15 AM	CH363 L25 Extraction	
Date:	15 November 2024	Number of Cadets: 11	
Studen	its Were:		
x	Working independently at their desks		
	Working in small, cooperative groups		
	Making a presentation		
	Listening to a lecture		
	Viewing a film		
	Taking a test		
X	Other: Working on IPS for first 30 minutes of class	S.	
Instruc	tor was:		
X	Lecturing		
	Facilitating a question-and-answer seque	nce	
	Demonstrating a concept		
☐ Introducing a new concept			
	Reviewing for a test		
Other: Procturing the IPS during first part of course, then went into lecture.			
Comm			
Cad	ets seemed engaged by problem set and discussion of	of extraction methods.	
Discussion of Figure 8.1 was interesting. You said distillation was sometimes cheaper, but you never addressed the question "why use extraction" that this figure is intended to answer. It is a good idea to mention heat duty.			
I suggest you set up a flash to separate a 50/50 mol% mixture of acetic acid and water. This flash or a trayed distillation distillation both work well in CHEMCAD. But the boiling point of acetic acid is 118 C, making it the heavy key, and water the light key. Because water has a high heat of vaporization, it is expensive to run this distillation because you are essentially boiling water.			
In discussion of Table 8.1, put in more background. For example, aconitic acid is found in molasses and molasses comes from sugar refining, which is a huge industry. Aconitic acid is recovered for use in rubber manufacturing and as a food additive for flavorings.			
Sometime it is a good idea to show the molecular stick figures. For example, showing acetic acid, water, and ethyl acetate allows you to discuss IMF's. like-dissolves-like, etc. There is a free drawing tool at https://chemaxon.com/marvin.			
More comments follow on reverse.			
Receiv	ed by: JAMES.COREY.MA Digitally signed by TTHEW.112703866 6 Date: 2024.12.02 12:49:13 -05'00'	Date: 2 DEC 24	

Addition Questions and Prompts for Discussion:
Did the instructor state the learning objectives?
\square Did the instructor provide context (show a link between the students' past experiences and
the current objectives)?
$\hfill \Box$ What activities were used to present information or teach skills? Examples include lecturing,
modeling, demos, etc.
$\hfill \Box$ What learning modes were used by the cadets during this lesson? Examples include reading,
listening, asking questions, solving problems, etc.
Did the activities cover a range of learning modes?
\square Did the instructor assess learning during the lesson, either formally or informally? If so, did
the instructor adjust teaching style as a result?
\square Did the instructor use any guided practice activities to practice the new skills or apply the new
concepts?
Were there any assignments for this lesson that allow the cadets to practice the skills or apply
the new concepts from the lesson on their own?
Were the cadets paying attention? If not, what methods were employed to ensure cadets
pay attention and apply effort?
☐ Were the cadets well-behaved? If not, how did the instructor respond?
Note: The questions in this section are meant to be discussion prompts and not requirements or to
form the basis of a cut scale.
Additional Comments:
When reviewing the ternary phase diagram, I noticed a few cadets struggling to keep up. I think you should have stepped through the inverse lever rule more deliberately to show how it leads to flow rates.
On your two-stage cascade, count the knowns and unknowns with the cadets. Make sure they can see the DOF's
When you ask the cadets a question, make sure you let them answer. Some cadets were able to get good answers in and I was very impressed, but I noticed at least one case where you answered for them.
One thing I noticed what that you showed a diagram for a countercurrent cascade. What about the co-current cascade?

A &	Observing Faculty:
DR. BIAGLOW	LTC COWART
Time: 0950 - C Hour	CH365 - THERMODYNAMIC
0950 - C HOUR	
Date:	Number of Cadets:
OZ OCT ZOZY	/3
Students Were:	are party former and a
Working independently at their desks	
['] □ Working in small, cooperative groups	
☐ Making a presentation	
Listening to a lecture	
¹□ Viewing a film	
☐ Taking a test	
☐ Other:	1 - 1
Instructor was	
Instructor was:	
Lecturing	
☐ Facilitating a question-and-answer seq	uence
☐ Demonstrating a concept	
☐ Introducing a new concept	
☐ Reviewing for a test	
Reviewing for a testOther:	
☐ Other: Assessment:	
Assessment: Technical Mastery (0-3): Exacting.	
Assessment: Technical Mastery (0-3): Franker.	t coulds mobil a bit mae
Assessment: Technical Mastery (0-3): Exacting.	t coulds shrowed a bit mae
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try & gen	
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try & gen Classroom Decorum and Control (0-3): -> Comments:	
Assessment: Technical Mastery (0-3): Freehold. Presentation Style (0-3): -> Try & gen Classroom Decorum and Control (0-3): Excellent. Comments: - Lechne - Lecy. Let callets in	wolned on discussion as appropriate
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try the general	wolned on discussion as appropriate his reaction?
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try & gen Classroom Decorum and Control (0-3): Exactlent Comments: - Lecture - Lewy. Cut what is - "Wy set the for for - Problem 4.20 -> wheely we	wolned on discussion as appropriate him reaction?" - Stressler of beloning over.
Assessment: Technical Mastery (0-3): Exaction f. Presentation Style (0-3): -> Try to get Classroom Decorum and Control (0-3): Exc Comments: - Lecture - Levy. Let collets in - "Way not the for for Problem 4.20 -> wheety in - Add twist: 4.	wolned on discussion as appropriate him reaction?" - Stressler of beloning over.
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try to ger Classroom Decorum and Control (0-3): Exc Comments: - Lecture - Lewy. Cut coulds in - "Way not the for for - Problem 4.20 -> notwelf or - Add twist: 4. - hood use of warland for	robust on discuss in as appropriate his reaction?" - Stressler of beloning over. 20 is a punchy CHIOI / CH362 publicated to whom he same problem. There belongs ×10 one belonger.
Assessment: Technical Mastery (0-3): Exactlent. Presentation Style (0-3): -> Try & gen Classroom Decorum and Control (0-3): Exc Comments: - Lecture - Lewy. Cut what is - "Way not the for for - Problem 4.20 -> wheety we - Add twist: 4. - hood use of ownlead for up whas for hurchus.	reduct. noted on discussion as appropriate his reaction? - Stressle of beloning over. 20 is a purely CHIOI/CH362 pub and CHIOI/CH362 pub.
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Additio	on Questions and Prompts for Discussion:
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	Did the instructor state the learning objectives?
10	Did the instructor provide context (show a link between the students' past experiences and the current objectives)?
X X DAXX X X X X	What activities were used to present information or teach skills? Examples include lecturing, modeling, demos, etc. What learning modes were used by the cadets during this lesson? Examples include reading, listening, asking questions, solving problems, etc. Did the activities cover a range of learning modes? Did the instructor assess learning during the lesson, either formally or informally? If so, did the instructor adjust teaching style as a result? Receptor belong year. Did the instructor use any guided practice activities to practice the new skills or apply the new concepts? Were there any assignments for this lesson that allow the cadets to practice the skills or apply the new concepts from the lesson on their own? Were the cadets paying attention? If not, what methods were employed to ensure cadets pay attention and apply effort? See As Expected Were the cadets well-behaved? If not, how did the instructor respond?
	The questions in this section are meant to be discussion prompts and not requirements or to be basis of a cut scale.
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Instructor Observed:	Observing Faculty:
CPT hoLONSKI	LTC COWART
Time: 0940 CIDI HOUR	Course/Subject:
0940 CIDI HOUR	CHIOI - LSN 16
Date:	Number of Cadets:
30 SEP ZOZY	Number of Cadets:
Students Were:	
Working independently at their desks	
Working in small, cooperative groups	
☐ Making a presentation	
☐ Listening to a lecture	
☐ Viewing a film	
X Taking a test (MSTRUTUR QUIZ)	
Other:	
U Other.	
Instructor was:	
Lecturing (IMFS)	
Lecturing (/A/ 6)	(1- 1- 5-1 - 155)
Facilitating a question-and-answer sequen Demonstrating a concept (Lews 57)	ce (Louis Stevenson)
Demonstrating a concept (Laws)	cuc. ; afonding)
Introducing a new concept (IMFs)	1
Introducing a new concept (IMFs) Reviewing for a test (purchi with	er
Introducing a new concept (IMFs) Reviewing for a test (prodiction) Other:	enj
Reviewing for a test (prochi w	enj
Reviewing for a test (prodiction) Other: Assessment:	c .
Reviewing for a test (prodiction) Other: Assessment:	с
Assessment: Technical Mastery (0-3): 2 -> & puis	on laguage. Don't wit to
Assessment: Technical Mastery (0-3): 2 -> & puns Presentation Style (0-3): 3 -> Excercent	on laginge. Don't and to
Assessment: Technical Mastery (0-3): 2 -> & puns Presentation Style (0-3): 3 -> Exception Classroom Decorum and Control (0-3): 6 Pens	on lague. Don't mut to
Reviewing for a test production of the control (0-3): 2 > 6 production of the control (0-3): 6 production of the control	en laguege. Dor't out to
Reviewing for a test (prodiction of the control of	som laginge. Don't mut to
Reviewing for a test (prodiction of the control of	som laginge. Don't mut to
Reviewing for a test profit with Other: Assessment: Technical Mastery (0-3): 2 -> be profit of the presentation Style (0-3): 3 -> Exception Classroom Decorum and Control (0-3): 61647 Comments: Nice "Par" comic on smenne of the profit of	scroon (sm dol not have RDC)
Assessment: Technical Mastery (0-3): Z -> Le puis Presentation Style (0-3): 3 -> Excercent Classroom Decorum and Control (0-3): 61847 Comments: NICE "Par" comic on smenne God actual for office class. Cy -> CZy Niam in any of any	scroot. (SM drl not have RDC)
Assessment: Technical Mastery (0-3): Z -> be printing Presentation Style (0-3): 3 -> Exceptent Classroom Decorum and Control (0-3): GREAT Comments: - Nice "Print" comic on smerime be a refuse for office of smerime Cy -> CZy Nian is of your - ON OF2 -> could who also	som laginge. Don't mut to hunche composi- il. 50,80. hund Sty. (SM drd not have RDC) softi> gustini.
Assessment: Technical Mastery (0-3): Z -> be printing Presentation Style (0-3): 3 -> Exceptent Classroom Decorum and Control (0-3): GREAT Comments: - Nice "Print" comic on smerime - be nether the office class. - Cly -> CZy Nian is a fine - on off -> could no about	som laginge. Don't mut to hunche composi- il. 50,80. hund Sty. (SM drd not have RDC) softi> gustini.
Assessment: Technical Mastery (0-3): 2 -> be printing Presentation Style (0-3): 3 -> Exceptent Classroom Decorum and Control (0-3): 61847 Comments: - Nice "Pri" comic on somerime - be a refuse for shall class. - Cly -> Cly Niam is of go - on of 2 -> could who shall Solve bouls" when ye	scrool of the state of the RDC) string of the RDC) string of the scrope of the RDC) string of the scrope of
Assessment: Technical Mastery (0-3): 2 -> be provided for a test (provided for a test (provid	scrool of the state of the RDC of the state of the state of the state of the state of the scrool of
Assessment: Technical Mastery (0-3): 2 -> be provided for a test (provided for a test (provid	scrool of the state of the RDC) string of the RDC) string of the scrope of the RDC) string of the scrope of
Assessment: Technical Mastery (0-3): 2 -> be printing Presentation Style (0-3): 3 -> Exceptent Classroom Decorum and Control (0-3): 61847 Comments: Nice "Pro" comic on somerime Cost of actual for Style (1-85). Cly -> CIy Nian is af your on some shown in the selection of the	scrool of the state of the RDC of the state of the state of the state of the state of the scrool of
Assessment: Technical Mastery (0-3): 2 -> be provided for a test (provided for a test (provid	som laginge. Don't mut to inche confision. SCIBO. Low Str. (SM drl not have RDC) softi small gettig to his could gustion. gustion. yustion.
Assessment: Technical Mastery (0-3): 2 -> be provided for a test (provided for a test (provid	som laginge. Don't mut to inche confision. SCIBO. Low Str. (SM drl not have RDC) softi small gettig to his could gustion. gustion. yustion.
Assessment: Technical Mastery (0-3): 2 -> be pure Presentation Style (0-3): 3 -> Exception Classroom Decorum and Control (0-3): 61847 Comments: Nice "Par" comic on smenne Good actual to Station of a class. - Cly -> CZy Nian is of go - on of a could also also South of short of short of the short - good discussion of ideal (very H-backy: phase have (ET)	scrobe. She (sm dol not has RDC) stri gusting. gusting. gusting. A saled about 4 find e Expended land of.

Additio	on Questions and Prompts for Discussion:	
	Did the instructor state the learning objectives? (SHOWN ON SLISE)	
	Did the instructor provide context (show a link between the students' past experiences and	
	the current objectives)?	
	What activities were used to present information or teach skills? Examples include lecturing,	
	modeling, demos, etc.	
	What learning modes were used by the cadets during this lesson? Examples include reading,	
	listening, asking questions, solving problems, etc.	
	Did the activities cover a range of learning modes?	
X	Did the instructor assess learning during the lesson, either formally or informally? (ロッロン)	
′ 🗆	If so, did the instructor adjust teaching style as a result?	
	Did the instructor use any guided practice activities to practice the new skills or apply the new concepts?	
K	Were there any assignments for this lesson that allow the cadets to practice the skills or apply	
/ -	the new concepts from the lesson on their own?	
1	Were the cadets paying attention? If not, what methods were employed to ensure cadets	
(-	pay attention and apply effort? YES. LOOD, ATTENTIVE CLASS> Com-	
X	Were the cadets well-behaved? If not, how did the instructor respond?	noly.
(3
	Γhe questions in this section are meant to be discussion prompts and not requirements or to be basis of a cut scale.	
	we was goil film managed? Done the system gain - roungs wet thin of online goils? clock? 6 min.	
- Dis	sport not don to collains, due to e desty his	
- ho	will be good to daves who - us who - uslessler Dues	
	intrarvols vs. intercollegate.	
- I	an dipole: what do you need he son-dipole IMP?	
- Pr	netic WPR? Buckly work gog though INVS now.	
- 30	inn of beson ti below partie WPR (u/ 6-8 in	9.12)
	no of boson to below partie WPR (u/ 6-8 in n 20 m on IMFs belove partie WPR.	

Instructor Observed:		Observing Faculty:	
LTC Cowart		Dr. Nagelli	
Time:		Course/Subject:	
1035-1	150	CH485/LSN24: Dimensionless Differential	
		Transport Eqns	
Date:		Number of Cadets:	
07NOV	/24	17 cadets present	
Studen	ts Were:		
Х	Working independently at their desks		
	Working in small, cooperative groups		
	Making a presentation		
Х			
	□ Viewing a film		
	Taking a test		
	Other:		
Instructor was:			
Х			
Х	Facilitating a question-and-answer sequence		
	Demonstrating a concept		
	Introducing a new concept		
	Reviewing for a test		
	Other:		

Assessment:

Technical Mastery (0-3): 3; Great job with board work to demonstrate the importance of quantitative manipulation of equations using assumptions.

Presentation Style (0-3): 3; Really like your use of slides and Q-A with cadets to draw from them as you worked through equation derivations

Classroom Decorum and Control (0-3): 3; Classroom was to the standard for instruction.

Comments:

- 1. Lecture and derivation of scaling momentum balance with Q&A from 1035-1100 (ending at derivation of skin friction). I think the derivation and connecting f to h and km is really important and will be beneficial for the FE.
- 2. Slide format and reference to the page/section of text is good and helpful for cadets to follow along.
- 3. Board writing and management was good!
- **4.** The discussion and examples of the meaning of the dimensionless groups with visualizing Re and the importance of velocity for cooling and the application of Pr.
- 5. Good balance of derivations on the board referring to the slides
- **6.** Species mole balance example started at 1120 and application of concentration of A to the same example balance
- 7. I like leaving time at the end of class for AI and open forum for problems in

Received by:	COWART.SAMUEL.V		Date:
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Addition Questions and Prompts for Discussion:
X Did the instructor state the learning objectives?
X Did the instructor provide context (show a link between the students' past experiences and
the current objectives)?
☐ What activities were used to present information or teach skills? Examples include lecturing,
modeling, demos, etc. Lecturing and good balance of Q&A
X What learning modes were used by the cadets during this lesson? Examples include reading,
listening, asking questions, solving problems, etc. Problem solving and derivations
X Did the activities cover a range of learning modes? Mathematical derivations of balances and
connecting to dimensionless groups
☐ Did the instructor assess learning during the lesson, either formally or informally?
\square If so, did the instructor adjust teaching style as a result?
☐ Did the instructor use any guided practice activities to practice the new skills or apply the new concepts?
☐ Were there any assignments for this lesson that allow the cadets to practice the skills or apply the new concepts from the lesson on their own?
X Were the cadets paying attention? If not, what methods were employed to ensure cadets pay
attention and apply effort? Cadets were engaged and lesson objectives directly correlate to
problem sets
☐ Were the cadets well-behaved? If not, how did the instructor respond? Cadets were engaged and receptive
Note: The questions in this section are meant to be discussion prompts and not requirements or to form the basis of a cut scale.

Instructor Observed:		Observing Faculty:
MAJ Tobergte		Dr. Nagelli
Time:		Course/Subject:
0740-0855		CH101/LSN30: Enthalpy of Reaction
Date:		Number of Cadets:
08NOV24		15 cadets present
Students Were:		
Χ	Working independently at their desks	
	Working in small, cooperative groups	
Χ		
	□ Viewing a film	
Х	•	
Instruc	tor was:	
Χ	X Lecturing	
Х	Facilitating a question-and-answer sequence	
	Demonstrating a concept	
	Introducing a new concept	
	Reviewing for a test	
	Other:	
Assessment:		
	ASSESSMENT.	

Technical Mastery (0-3): 3; Liked the balance of your board work with Q&A

Presentation Style (0-3): 3; Good command of the classroom. I really like that cadets are open to asking questions for career in the Army and branch options.

Classroom Decorum and Control (0-3): 3; Classroom was to the standard for instruction!

Comments:

- **1.** The opening of the class for OPD was great! Great opportunity for academic development & mentorship for cadets love the phrase "you are your best career manager".
- **2.** Like the homework questions you recommended for cadets especially since this lesson is not on the major graded event.
- **3.** Board writing and management was good! 9.69 is a really good problem for cadets to practice and starting the class with this example as a instructor board problem is effective. I recommend a system vs surroundings discussion and we got there with the water and cube which cadets identified but I find that those that get to upper level engineering courses later...especially those in our major wrestle with that concept. Mass and energy balance is the class we hit the cadets with that a lot. I like that you had the problem worked out on the slide and it's a good review problem for cadets before your instructor quiz.
- **4.** The quiz was good. It tests conceptual understanding of the thermal equilibrium and applying the heat equation. I liked that the cadets had a chance to grade each others after with red pens! My recommendations are the following for you to consider:

- a. We got there eventually and I recommend having the cadets really dig into the concept of thermal equilibrium and average KE (problem 1 was good to really dig into this more). I remember that the cadets struggle with this similar to how heat loss and gained we have the ChemEs constantly work on with upper level chemE major courses.
- Recommend zooming in with the document camera on #3 and have the cut scales visible
 for specifics for the cadets ready when going over the problem especially since the quiz is
 40 points. There were specific questions about point cuts so be ready to pre-empt that for
 your section.
- c. Recommend going over sig figs specific to #3 and #4 good opportunity to reinforce to prep for the WPR next week.
- d. Timeline: End guiz review and discussion 0816; started lesson 30 at 0817
- **5.** For Lesson 30 content, I recommend drawing from the cadets on enthalpy as a state function to reinforce concepts again. This is where sys and surroundings will come up again and heat released and absorbed is easier conceptually to connect to q from lesson 29.
 - a. Cadets generally wrestle with state function and standard state and this may be the first time the cadets will see standard state enthalpy. Important cadets understand the reason why we use standard state for measurements as a reference state.
 - b. I liked that you solved the delta H of the reaction using bond energies on the board! When discussing delta H reaction from heats for formation, recommend emphasizing dimensional analysis for moles to cancel when choosing a board to brief or having the instructor solution ready. Good opportunity to have cadets practice dimensional analysis.
 - c. When you complete your instructor solution for delta H reaction using deltHf, recommend dimensional analysis to show cadets that it is q=deltaHrxn which can be reported as overall heat with respect to "mole of reaction" just like they did for the coffee cup of the calorimeter.

Received by:

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Date: 08NOV24

Additi	on Questions and Prompts for Discussion:
Х	Did the instructor state the learning objectives?
Х	Did the instructor provide context (show a link between the students' past experiences and
th	e current objectives)?
	What activities were used to present information or teach skills? Examples include lecturing,
	modeling, demos, etc. Lecturing and good balance of Q&A
Χ	What learning modes were used by the cadets during this lesson? Examples include reading,
lis	tening, asking questions, solving problems, etc. Problem solving and discussions on concepts
Χ	Did the activities cover a range of learning modes? Mathematical derivations of balances and
со	nnecting to dimensionless groups
	Did the instructor assess learning during the lesson, either formally or informally?
	If so, did the instructor adjust teaching style as a result?
	Did the instructor use any guided practice activities to practice the new skills or apply the new concepts?
	Were there any assignments for this lesson that allow the cadets to practice the skills or apply the new concepts from the lesson on their own?
Χ	Were the cadets paying attention? If not, what methods were employed to ensure cadets pay
att	ention and apply effort? Cadets were engaged with the instructor quiz and effective review of
ma	aterial from lesson 29 for the WPR. Liked the preview/summary of lesson 30 objectives and
ha	ving cadets take notes on concepts
	Were the cadets well-behaved? If not, how did the instructor respond? Cadets were engaged
	and receptive
	The questions in this section are meant to be discussion prompts and not requirements or to
form t	he basis of a cut scale.

Instructor Observed: Dr. Albena Ivanisevic	Observing Faculty: Dr. Simuck F. Yuk	
Time: 07:40 to 08:55	Course/Subject: CH350 Bioprocess Engineering	
Date: 09/17/24	Number of Cadets: 13	
Students Were:		
✓ Working independently at their desks		
☐ Working in small, cooperative groups		
☐ Making a presentation		
✓ Listening to a lecture		
✓ Viewing a film		
☐ Taking a test		
✓ Other: Taking a note		
Instructor was:		
✓ Lecturing		
✓ Facilitating a question-and-answer sequence	ce	
✓ Demonstrating a concept		
✓ Introducing a new concept		
□ Reviewing for a test		
□ Other:		
Assessment:		
Technical Mastery (0-3): 3		
Presentation Style (0-3): 3		
Classroom Decorum and Control (0-3): 3		
Comments: The class began at 07:40, section marcher calling the class to attention. All the cadets are present for the class. The physical and chemical properties of essential biomolecules consisting of the cell were discussed by the instructor today. Cadets were periodically asking questions about the important chemical bonds shown in the biomolecules. Videos have been shown to reinforce the cadets' understanding on the main organic chemistry concepts closely associated with the biomolecules. The real-life examples were provided, so cadets can make a better understanding on how these biomolecules are integrated in the human body. The class was concluded, and cadets were officially dismissed at 08:55. Overall, Dr. Ivanisevic presented a wonderful class in CH350, and cadets were enjoying and most importantly enjoying the contents presented during the lesson.		
Received by:	Date: 09/16/24	

Addition Questions and Prompts for Discussion:		
	Did the instructor state the learning objectives?	
	Did the instructor provide context (show a link between the students' past experiences and the current objectives)?	
	What activities were used to present information or teach skills? Examples include lecturing, modeling, demos, etc.	
	What learning modes were used by the cadets during this lesson? Examples include reading, listening, asking questions, solving problems, etc.	
	Did the activities cover a range of learning modes?	
	Did the instructor assess learning during the lesson, either formally or informally?	
	If so, did the instructor adjust teaching style as a result?	
	Did the instructor use any guided practice activities to practice the new skills or apply the new concepts?	
	Were there any assignments for this lesson that allow the cadets to practice the skills or apply the new concepts from the lesson on their own?	
	Were the cadets paying attention? If not, what methods were employed to ensure cadets	
	pay attention and apply effort?	
	Were the cadets well-behaved? If not, how did the instructor respond?	
	The questions in this section are meant to be discussion prompts and not requirements or to e basis of a cut scale.	

Instructor Observed: CPT Nijel Rogers		Observing Faculty: Dr. Simuck F. Yuk	
Time: 09:50 to 11:05		Course/Subject: CH101 General Chemistry I	
Date: 09/10/24		Number of Cadets: 17	
Studen	ts Were:		
\checkmark	Working independently at their desks		
	Working in small, cooperative groups		
	Making a presentation		
✓	Listening to a lecture		
	Viewing a film		
	Taking a test		
✓	Other: Taking an in-class instructor's quiz		
Instructor was:			
	Lecturing		
√	Facilitating a question-and-answer sequence	ce	
√	Demonstrating a concept		
√	Introducing a new concept		
	Reviewing for a test		
	Other:		
A			
Assessment:			
Technical Mastery (0-3): 3			
Presentation Style (0-3): 3			
Classroom Decorum and Control (0-3): 3			

Comments:

Class started at 09:50, and an in-class guiz was administered from 09:52 to 10:00. Clear instructions were provided to the CH101 cadets regarding the authorized resources and quiz content. The quiz questions were closely aligned with the learning objectives covered in previous lessons. After completing the quiz, cadets graded their work with peers, and the approved solutions were reviewed by the instructor. Class announcements, including updates on EOH grades, were made at 10:00. The instructor revisited previous learning objectives to reinforce cadets' understanding of previously introduced concepts and their connection to the current lesson's objectives. Key learning objectives were displayed on the board, and cadets were periodically sent to the board, and thus allowing them to directly apply the concepts learned in class. They actively participated by asking questions and responding to the instructor's prompts throughout the session. All learning objectives and core concepts were thoroughly covered. Demo was given at 10:58 using magnets, reinforcing the concepts of magnetism; maglev train was introduced as the example of application. Overall, CPT Rogers delivered an excellent class, and the cadets are clearly enjoying their learning experience in his CH101 class.

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Addition Questions and Prompts for Discussion:		
	Did the instructor state the learning objectives?	
	Did the instructor provide context (show a link between the students' past experiences and	
	the current objectives)?	
	What activities were used to present information or teach skills? Examples include lecturing,	
	modeling, demos, etc.	
	What learning modes were used by the cadets during this lesson? Examples include reading, listening, asking questions, solving problems, etc.	
	Did the activities cover a range of learning modes?	
	Did the instructor assess learning during the lesson, either formally or informally?	
	If so, did the instructor adjust teaching style as a result?	
	Did the instructor use any guided practice activities to practice the new skills or apply the new concepts?	
	Were there any assignments for this lesson that allow the cadets to practice the skills or apply the new concepts from the lesson on their own?	
	Were the cadets paying attention? If not, what methods were employed to ensure cadets	
	pay attention and apply effort?	
	Were the cadets well-behaved? If not, how did the instructor respond?	
	The questions in this section are meant to be discussion prompts and not requirements or to ne basis of a cut scale.	