

No memo for this term

Meeting was on 18 December 2019.



UNITED STATES MILITARY ACADEMY
WEST POINT

Chemical Engineering Lab

CH459 AY20-1

Course and Program AAR

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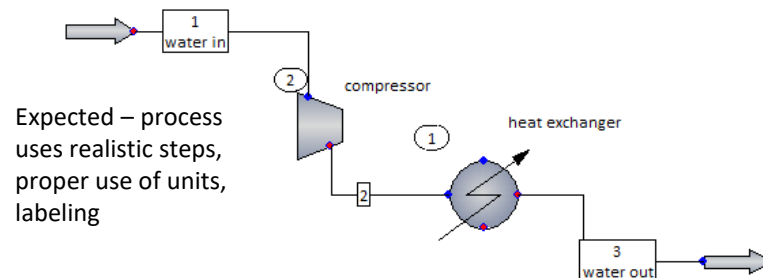
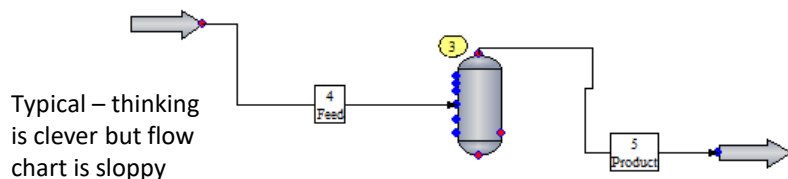
- ☐ **CH363**
- ☐ **CH365**
- ☐ **CH485**
- ☐ **CH459**
- ☐ **Chemical Engineering Program AAR Comments**



- ❑ **Sizing of condensers and re-boilers in the capstone. Need to teach it in the class or not include it in the capstone.**
- ❑ **Students lack thermo and mass transport acumen when they encounter the topics in the book; leads to a watered down version of what the book is presenting.**
- ❑ **Labs need re-structuring. Recommend using 2-4 of the first periods to cover chapters 2 and 3.**
- ❑ **Re-evaluate problem set problems. Are we using the right ones?**



- ❑ **CHEMCAD acumen needs work; Cadet CDP flowcharts were sloppy (Assignment – design a process to go from T1,P1 to T2,P2)**



- ❑ **At end of course 8 cadets had wrong method in thermo settings.**
- ❑ **Writing assignment – abstract for CDP. Iterative, first draft was universally poor but improved with intense feedback from instructor.**
- ❑ **Writing assignment – resumes. Also iterative. A few first drafts were good, most poor. Cadets generally unable or unwilling to identify relevant skills technical skills, but improved with feedback.**
- ❑ **Performance on exams was strong. Averages on WPRs 88%.**
- ❑ **CDP went well. Individual problems (molecule and conditions specific to cadets) – intense grading but worth it. Cadets could and did collaborate but needed results for their specific case.**
- ❑ **Course assessment incomplete as of 12-21-18. Tracking performance in FEE. Course assessment complete as of 1-4-19.**



- ☐ **Reduce regrade opportunities**
- ☐ **Relook lesson sequence – more problem solving days towards the end (spread out more)**
- ☐ **Shorten ICPS**



- ❑ **CHEMCAD acumen needs work; Individual CHEMCAD grade AY20-1 ...still requires a fix.**
- ❑ **IPR grade assigned AY20-1 → improved products**
- ❑ **CHEMCAD license on laptop is the way ahead!**
- ❑ **There is new batch/CSTR lab and new HFC.**
- ❑ **Calibrate all equipment during spring/summer; run through all labs with CHEMCAD summer with lab tech...Maintain this!**
- ❑ **Cadets not sharing TTPs for CHEMCAD...still problematic.**
- ❑ **Try to maintain 3 cadet lab group integrity. 2&4 Cadet groups dysfunctional.**
- ❑ **TEE worth 700 points; WPRs worth 350 points**
- ❑ **Improvements in writing/reports observed due to intense IPR/QA/QC.**
- ❑ **Work load in CH459 is not sustainable moving forward.**
- ❑ **Add CHEMCAD workshops: RXTRs; FLASH; HTXCHGR; DIST**



- ☐ Many lessons learned from FEE at Education Center/ registration/ etc.
- ☐ CH459 labs must be done year round...Winter/Spring/Summer Training
- ☐ Conference attendance...supported ...should maintain this AY20-2
- ☐ CH459: not sustainable in current form
- ☐ Main effort for AY20-2 and summer is ABET preparation
- ☐ ABET advisory will be 9-10APR19
- ☐ Possible ABET recertification dates: 12-15SEP; 19-20SEP
- ☐ NCEES and DAPE accounts created; FEE and DAPE paid for
- ☐ BH136?
- ☐ Sustain max attendance at AICHE
- ☐ Sustain ChemE outings
- ☐ Sustain Communication
- ☐ Army / AF Tailgate – 10/11 JAN

CHEME PROGRAM ROCKS!



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Guidance/Questions?