

BLUF: Follow the checklist below.

- _____ (1) familiarize yourself web site materials,
- _____ (2) read the Standing Instructions for Students (SIS),
- _____ (3) prepare for CHEMCAD inspection,
- _____ (4) prepare for textbook inspection,
- _____ (5) prepare for Adobe Acrobat Pro inspection,
- _____ (6) read the Lesson 1 review material,

Tuesday's and Thursday's labs (R1 and S1) will meet during lab hours on Tuesday 9 January and Thursday 11 January, respectively, in Bartlett 331. CHEMCAD and Adobe Acrobat will be required for the exercise.

Hello, welcome back to West Point, and welcome to CH402.

I am very excited to be working with you again. I hope you will find chemical engineering process design to be as interesting as I do. Just like last semester, the course has a web site on Canvas/Github and there are Canvas repositories for your work. To get things off to a smooth start, some logistical items must be ironed out before class. Each is described below. Please read this email carefully and follow the instructions and due dates closely.

1. WEB SITES:

<https://westpoint.instructure.com/courses/5790>

<https://abiaglow.github.io/CH402/indexCH402.html>

Please verify that these links work, bookmark them, and write them down in your notebook so that you have it during class.

2. STANDING INSTRUCTIONS FOR STUDENTS (SIS)

Suspense: Monday 8 JAN 2024 start of class. Read the SIS carefully. I will be closely following the policies described there.

3. CHEMCAD INSPECTION

Suspense: Monday 8 JAN 2024 start of class.

We will be making heavy use of CHEMCAD this semester. Please make sure CHEMCAD is installed and licensed on your laptop so that you can work on assignments. You will need to obtain authorization to use the software. Authorization is obtained from a network license server, as described below.

Network License Server: The network license server is located on USMAWKDMCHEMNG. The procedure for accessing the network license server is as follows: Open CHEMCAD. In the main menu, click File -> Licensing. Then click Setup and then Add/remove servers. Under "Select server type," choose SuperProNet, then type the name of the server given above. This should give you access to the software. A link to this procedure with screenshots can be found in Canvas Home in Resources (Software item #2).

If you cannot access the server, open a CMD window, type “ping usmawkdmchemng” at the prompt, and email a screenshot of the results to me.

If you need to re-install CHEMCAD, the installation file is in Canvas Home in the Resources Quick Access link (Software item #1). Download the software at the link next to “CHEMCAD Software” and run it.

The inspection on lesson 1 is to verify that you have a working version of CHEMCAD on your laptop. Please also open CHEMCAD on your assigned lab PC and have that ready for inspection as well.

You will also need to update the Chemical Engineering Plant Cost Index in CHEMCAD. The database file is in Canvas Home in the Resources Quick Access link (Software item #3). Download this file and add it file to C:\Program Files (x86)\Chemstations\CHEMCAD 8. This will replace the existing file with cost indices up to January 2024. I will be updating this file about once a month throughout the semester.

4. TEXTBOOK INSPECTION

Suspense: Monday 8 JAN 2024 start of class.

The textbook is required for this course, and I recommend that you bring it to class each day. We will be using “Plant Design and Economics for Chemical Engineers, 5th edition, by Peters, Timmerhaus, and West. You should already have a copy from last semester. There will be a textbook inspection on the first day of class to verify that you have access to the book. You may use print or electronic versions. If you rent the book, please make absolutely sure that you have access to it through TEE week.

5. ADOBE ACROBAT PRO

Suspense: Monday 8 JAN 2024 start of class.

We will be making heavy use of Adobe Acrobat Pro this semester. The license may be expiring on your system. If that is the case, go to the Company Portal and download and install the “Adobe Acrobat Pro License Updater” and re-start your computer. Please have Adobe Acrobat Pro open on your computer at the start of class on Lesson 1.

6. ADDITIONAL LESSON 1 REVIEW MATERIAL

Suspense: Monday 8 JAN 2024 start of class.

The textbook by Peters and Timmerhaus is a design textbook, which means that results are usually presented without derivation. Lesson 1 makes heavy use of the mechanical energy balance discussed in CH365. Reviewing lesson 7 on the CH365 web site and pages 49-50 in the thermodynamics textbook on pages 49-50 will also help you prepare. The mechanical energy balance equation also appears on page 181 of the FE Reference Manual linked to the course web site. Reviewing this page will help you prepare for CH402 and CH400.

I have also prepared some review material on course admin and program student outcomes. This information is included in the attachment. Please read this material before the start of class.

Please let me know if there are any questions.

See you in class!
Dr. Andrew Biaglow

Professor of Chemical Engineering
Course Director, CH402