

# Practicalities for the course Principles of Physical Chemistry (CHEM-C1230) 2023, 5.9.–18.10.2023

**Lectures:** Tue 10:15-12:00 and Thu 12:15-14:00 in Aluminium - C100, Circular Raw Materials Hub (the materials Science building, NOT Chem. building) , EXCEPT at Thu 5.10. in KE4 (C301) Chem. building.

**Exercisers:** Fri 8.9.-13.10. in Aluminium - C100.

Text book: Engel book Physical Chemistry 4<sup>th</sup> edition (Part 1, Thermodynamics). The book is in Pearson electronic system.

See the instructions to log in to Pearson system in this folder. (file Aalto Mastering Phys Chem)

General comment of the use of AI tools (like ChatGPT). They can be used during the course, but they are NOT allowed in the exam.

Exercises: Weekly exercises (starting at 8.9.) are done in Pearson web-based system. You will get points for the exercises and the exercise points will be max. **25 % of the course points**.

NOTE you need a computer in the exercise. There is nothing on the paper. You probably need paper to do the exercises.

We will organize exercises sessions every week (on Friday). The purpose of the exercises sessions is to help you to solve the problems. Deadline to return the exercises is on Mondays. First DL is 11.9. There is also a web-based training (Intro to Exercise system) of the Pearson system from which you do not get points. Please, do the training before the first exercise session.

Course assistants:

Shubham Mondal

Quizzes: The small quizzes in MyCourses will contribute **5 %**. The quizzes are there to motivate for reading the text book. The quizzes should be done around lectures. There will close some days after the lectures.

Exams: Exam will be done **in classroom**, and it will contribute **70 %** to the course points. You can take a computer and calculator to the exam. You have access to the text book and data in the exam.

The exam time is 3 h but if you have dyslexia (suom. lukihäiriö) you need to note that in advance and you will have 4 h of time. Send me an email.

## Schedule 2023

5.9.2023 Tue 10-12 Introduction, Chapter 1, ideal and real gases  
7.9.2023 Thu 12-14 Chapter 2, heat, internal energy, enthalpy  
8.9.2023 Fri 14-16 Exercises, introduction, chapter 1, end of quiz 1  
12.9.2023 Tue 10-12 Chapter 2, heat, internal energy, enthalpy  
14.9.2023 Thu 12-14 Chapter 3 state functions  
15.9.2023 Fri 14-16 Exercises, chapter 2 and 3, end of quiz 2 and 3  
19.9.2023 Tue 10-12 Chapter 4 thermochemistry  
21.9.2023 Thu 12-14 Chapter 5 entropy  
22.9.2023 Fri 14-16 Exercises, chapter 4 and 5 , end of quiz 4 and 5  
26.9.2023 Tue 10-12 Chapter 6  
28.9.2023 Thu 12-14 Chapter 7  
29.9.2023 Fri 14-16 Exercises, chapter 6 and 7 end of quiz 6 and 7  
3.10.2023 Tue 10-12 Chapter 8  
5.10.2023 Thu 12-14 Chapter 9  
6.10.2023 Fri 14-16 Exercises, chapter 8 and 9, end of quiz 8 and 9  
10.10.2023 Tue 10-12 Chapter 18, kinetics  
12.10.2023 Thu 12-14 Chapter 19  
13.10.2023 Fri 14-16 Exercises, chapter 18 and 19, , end of quiz 18 and 19

Exam: 18.10.2023 14-17 (or 18)

## Exam instructions for CHEM-C1230 - Principles of Physical Chemistry autumn 2023

The exam is held in classroom. The exam time is 3 h. You can have a computer and/or the (physical) textbook with you.

You can use any material you find but do not copy it directly to the answers. The points will be reduced if I find direct copy form e.g. Wikipedia, the textbook, ChatGPT or alike. You need to answer to the questions with your own words. In numerical question, you need to provide some intermediated results. I need to know how you solved the problems.

The exam **starts at 14:00, 18.10.2023 Kemian tekniikka, Ke2 - A304**

Note if you have a special permit you can have longer exam time (4 h).

**There will be new exams and** the exercise points are taken into account for exams in this academic year.

Next exam: 11.12.2023, 9.00–13.00, Kemian tekniikka, Ke2 - A304