COURSE DETAIL

PHYSICAL CHEMISTRY I: EQUILIBRIUM THERMODYNAMICS AND STATISTICAL MECHANICS

Country
Hong Kong

Host Institution
Hong Kong University of Science and Technology (HKUST)

Program(s)
Hong Kong University of Science and Technology

UCEAP Course Level
Lower Division

UCEAP Subject Area(s)
Chemistry

UCEAP Course Number
21

UCEAP Course Suffix

UCEAP Official Title
PHYSICAL CHEMISTRY I: EQUILIBRIUM THERMODYNAMICS AND STATISTICAL MECHANICS

UCEAP Transcript Title
PHYSICAL CHEM I

UCEAP Quarter Units
4.50

UCEAP Semester Units
3.00

Course Description

The course consists of two parts. The first part teaches the equilibrium thermodynamics, covering the laws of thermodynamics and thermodynamics functions, with applications to various problems in phase equilibrium, chemical and electrochemical equilibrium. The second part teaches the equilibrium statistical thermodynamics, covering the Boltzmann distribution, the statistical ensembles and partition functions and their relations to thermodynamics functions.

Language(s) of Instruction
English

Host Institution Course Number
CHEM2410

Host Institution Course Title
PHYSICAL CHEMISTRY I: EQUILIBRIUM THERMODYNAMICS AND STATISTICAL MECHANICS

Host Institution Course Details
https://prog-crs.hkust.edu.hk/ugcourse/2025-26/search?keyword=CHEM2410

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Chemistry

Course Last Reviewed
2025-2026

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