

COURSE DETAIL

GENERAL CHEMISTRY

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Chemistry

UCEAP Course Number

10

UCEAP Course Suffix

C

UCEAP Official Title

GENERAL CHEMISTRY

UCEAP Transcript Title

GENERAL CHEMISTRY

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course presents the fundamentals of chemistry including the following topics: atomic structure based on quantum mechanics; atomic properties; trends in periodic table; chemical bonding (Lewis structures, VSEPR theory, hybridization, and molecular orbital theory); gaseous and aqueous equilibria; properties of inorganic and organic acids, bases, buffers; titrations; phase changes; molecular orbital theory; thermochemistry; thermodynamics; free energy changes; electrochemistry; chemical kinetics; coordination compounds; organic chemistry; structure, conformations, and relative energies of organic molecules; application of thermodynamics and kinetics to organic and biochemical reactions; use of molecular modeling software to illustrate molecular structures and their relative energies. This class has a separate general chemistry lab. There are five recitations that go along with the lectures. Text: Theodore L. Brown, et al., CHEMISTRY: THE CENTRAL SCIENCE. This course is taught in Chinese, but the text is in English.

Language(s) of Instruction

Host Institution Course Number

Chem1009

Host Institution Course Title

GENERAL CHEMISTRY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Chemistry

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