COURSE DETAIL

INORGANIC REACTIONS AND SPECTROSCOPY

Country

Korea, South

Host Institution

Korea Advanced Institute of Science and Technology (KAIST)

Program(s)

Korea Advanced Institute of Science and Technology, KAIST

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Chemistry

UCEAP Course Number

165

UCEAP Course Suffix

UCEAP Official Title

INORGANIC REACTIONS AND SPECTROSCOPY

UCEAP Transcript Title

INORG REACTNS&SPCTR

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course is an in-depth exploration of the mechanisms underlying inorganic and organometallic reactions, with a particular focus on understanding their fundamentals and applications. Students examine key aspects of organometallic chemistry, including bonding, reactivity, and catalytic cycles, while also delving into spectroscopic and non-spectroscopic techniques used to probe reaction mechanisms. Techniques such as NMR, IR, UV-Vis spectroscopy, and kinetic studies are emphasized to elucidate reaction pathways and intermediate characterization. The course also highlights cutting-edge trends in inorganic and organometallic chemistry, showcasing recent advancements in catalysis and chemical transformations. By the end of the semester, students will develop a strong foundation in mechanistic analysis and contemporary methodologies used in inorganic chemistry research. CH344 is recommended as a prerequisite course. All lectures will be in English.

Language(s) of Instruction

English

Host Institution Course Number

CH444,CH40031

Host Institution Course Title

INORGANIC REACTIONS AND SPECTROSCOPY

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

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