COURSE DETAIL

INSTRUMENTATION
Country China
Host Institution Fudan University
Program(s) Fudan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Environmental Studies
UCEAP Course Number 171
UCEAP Course Suffix
UCEAP Official Title INSTRUMENTATION
UCEAP Transcript Title INSTRUMENTATION
UCEAP Quarter Units 3.00
UCEAP Semester Units 2.00

Course Description

Course Objective

1. Have a basic understanding of quantitative instrumental analysis that involves electromagnetic radiation, spectroscopy, mass spectrometry, electrochemistry, and chromatography.

2. Be familiar with modern methods for the analyses of chemical substances in a variety of matrices, and the interpretation of data obtained from such analyses.

3. Be able to do calculations associated with the quantitative instrumental analyses.

4. Be able to draw conclusions based on analyses and calculations.

Instrumentation course will introduce the basis of electromagnetic radiation, Mass Spectra as well as chromatography. Students in this course will understand the theories, methodology, and structure of the related instruments.

This course will use “Principles of Instrumental Analysis” as the major reference book, combined with knowledge of up to date modern instruments (from department lab as well as the newest literature). Student will have the elemental capability to solve practical problems by using various instruments.

Language(s) of Instruction
English

Host Institution Course Number
ENVI130071

Host Institution Course Title
INSTRUMENTATION

Host Institution Course Details

Host Institution Campus
Host Institution Faculty
Host Institution Degree
Host Institution Department Environmental Science and Engineering
Course Last Reviewed 2023-2024

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