COURSE DETAIL

ANALYTICAL METHODS IN ORGANIC CHEMISTRY
Country Netherlands
Host Institution Wageningen University and Research Center
Program(s) Wageningen University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Chemistry
UCEAP Course Number 100
UCEAP Course Suffix
UCEAP Official Title ANALYTICAL METHODS IN ORGANIC CHEMISTRY
UCEAP Transcript Title ANALYTC ORGNC CHEM
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description
This course introduces the student to both theory and practical application of chromatographic analyses and separation techniques. It also covers the basic isolation techniques for components of various chemical classes. Attention is given to the qualitative and quantitative analysis of, e.g., preservatives, drugs, sugars, and pollutants using a variety of techniques (e.g., TLC, HPLC, GC, capillary electrophoresis (CE) and ELISA). Students are introduced to the theory and practical applications of spectroscopic methods aiming towards the structural analysis of organic compounds, including proteins. The combination of UV/VIS, IR & NMR spectroscopy and mass spectrometry (MS) is discussed and used. During the practical work these methods are applied towards the elucidation of the structure of unknown compounds. Special emphasis is also given to the application of GC-MS and LC-MS including theory, scope, and limitations, and practical usage in the analysis of food contaminants.

Language(s) of Instruction

Host Institution Course Number
ORC-11806

Host Institution Course Title
ANALYTICAL METHODS IN ORGANIC CHEMISTRY

Host Institution Campus
Biotechnology

Host Institution Faculty

Host Institution Degree

Host Institution Department
Organic Chemistry

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