

99-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	分析化學	Serial No. / ID	0456 / MHI2004
Dept.	藥用植物與保健學系	School System / Class	大學日間部2年1班
Lecturer	王正仁	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(三)56 / J320 (四)3 / J320	Language	Chinese

Introduction
<p>Analytical chemistry is important to the student from Department of Medicinal Botanicals and Health Care. For the identification and quantitation of active ingredient is rely on the use of analytical chemistry methods. Therefore, this curriculum's goal is helping the student to know the analytical chemistry the basic principle and the methodology, including chemistry measurement, the parsing process, tools of analyzes, the simple mathematics operation and the statistical method, the quality assurance and validation methods, analytical methods of weight and the combustion, the buffer and titration, the chemical equilibrium and so on. How simultaneously also causes the student to know to apply these methods in other domains.</p>

Outline
<p>The aim of this course is for non-chemistry major students. The lecture is to introduce the chemical analysis using brief, interesting and fundermental way. The content of units including: The Analytical Process, Tools of the Trade, Math Toolkit, Statistics, Quality Assurance and Calibration Methods, Good Titrations, Gravimetric and Combustion Analysis, Introducing Acids and Bases, Buffers, Acid-Base Titrations, Polyprotic Acids and Bases, A Deeper Look at Chemical Equilibrium, EDTA Titrations, Electrode Potentials, Electrode Measurements, Redox Titrations, Instrumental Methods in Electrochemistry, Spectrophotometry: Instruments and pplikations, Principles of Chromatography and Mass Spectrometry.</p>

Prerequisite
High School Chemistry and mathmatics