

Liverpool John Moores University

Title: Analysis of Medicinal Plant Ingredients
Status: Definitive
Code: **5503YAUBIO** (127888)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Yunnan Agricultural University

Team	Leader
Katie Evans	Y

Academic Level: FHEQ5
Credit Value: 20
Total Delivered Hours: 58
Total Learning Hours: 200
Private Study: 142

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	56

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam	70	2
Test	AS2	Coursework	30	

Aims

The module aims to provide students with an opportunity to analyse and study the internal components of traditional Chinese medicine plants by physical and chemical test methods, so as to provide scientific basis for the development and utilisation value of some traditional Chinese medicine plants.

Learning Outcomes

After completing the module the student should be able to:

- 1 Explain the basic theory and concept of pharmaceutical plant component analysis.
- 2 Discuss the application of analysis of medicinal plant ingredients in pharmaceutical research and the composition analysis and utilisation of medicinal plants.
- 3 Examine the research progress of analysis of medicinal plant ingredients.
- 4 Describe the basic experimental principles related to the analysis of medicinal plant components.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Exam	1	2	3	4
Test	1	2	3	4

Outline Syllabus

The module will provide an overview of analysis of medicinal plant ingredients, it will cover species and evolution characteristics of medicinal plant ingredients, acquisition of medicinal plant materials, structure characteristics parent ring, derivation sources and distribution of main families and genera of medicinal plant ingredients, preliminary test and purification of medicinal plant ingredients, spectral analysis of molecular structure of medicinal plant ingredients, and molecular improvement of medicinal plant ingredients.

Learning Activities

The module content will be delivered through lectures and practical teaching activities.

Notes

Based on the historical background of the modernisation of traditional Chinese medicine in China, and the resource advantage of Yunnan as the "Kingdom of plants", this module systematically teaches the modern analysis methods of active ingredients of medicinal plants, including chromatography analysis, spectroscopy analysis, chromatography-spectroscopy analysis, biochemical analysis and molecular biology analysis.