

Organic Chemistry

Module Information

2022.01, Approved

Summary Information

Module Code	3503YAUBIO
Formal Module Title	Organic Chemistry
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 3
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
LJMU Partner Taught

Partner Teaching Institution

Institution Name	
Yunnan Agricultural University	

Learning Methods

Learning Method Type	Hours
Lecture	40
Practical	24

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-PAR	PAR	January	12 Weeks

Aims and Outcomes

Aims

The aim of the module is to teach students about the composition, structure, properties, synthesis, mutual transformation methods and related theoretical knowledge of organic compounds. Through the study of this module, students will master the basic knowledge and basic theory of organic chemistry, understand the latest achievements and development trends of the subject, and master the basic operation skills of organic chemistry experiments.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Apply the basic theory and knowledge of organic chemistry to analyse, judge, and solve organic chemistry problems.
MLO2	2	Recall the naming rules of various organic compounds and the different representation methods of organic molecular structures, adopting the system of nomenclature to name various organic compounds, and write the organic molecular structural formula correctly.
MLO3	3	Describe the physical and chemical properties of various organic compounds, apply basic organic reactions to identify organic compounds, infer the structure of organic compounds, design reasonable organic synthesis routes and analysis, and solve complex organic chemistry problems.
MLO4	4	Record and process experimental data, accurately draw the schematic diagram of the experimental device, write the experimental report, and consult the relevant chemistry manual.
MLO5	5	Demonstrate basic experimental techniques relevant to organic chemistry, whilst observing good laboratory practice.

Module Content

Outline Syllabus	The module includes study of alkanes, alkenes, alkynes, diolefins, aromatic hydrocarbons, optical isomerism, halogenated hydrocarbons, alcohols, phenols, ethers, aldehydes, ketones, quinones, carboxylic acids and their derivatives, substituted acids, nitrogen and phosphorous compounds, heterocyclic compounds, fats, and carbohydrates. Practical experiments include recrystallization of acetanilide, ordinary distillation, paper chromatography, extraction of crude oil and steam distillation.
Module Overview	
Additional Information	The module is designed to promote the development of students' ability in autonomous learning, knowledge application and innovative thinking.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Exam	Exam	30	2	MLO1, MLO2, MLO3, MLO4, MLO5
Report	Practice	20	0	MLO1, MLO2, MLO3, MLO4, MLO5
Exam	Exam	50	0	MLO1, MLO2, MLO3, MLO4, MLO5

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Katie Evans	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings