Liverpool John Moores University

Title:	Ecology
Status:	Definitive
Code:	**6503YAUBIO** (127891)
Version Start Date:	01-08-2021
Owning School/Faculty:	Biological and Environmental Sciences
Teaching School/Faculty:	Yunnan Agricultural University

Team	Leader
Katie Evans	Y

Academic Level:	FHEQ6	**Credit Value:**	10	**Total Delivered Hours:**	50
Total Learning Hours:	100	**Private Study:**	50		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	48

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Exam	70	2
Test	AS3	Problem solving using principles and methods of ecology	10	
Exam	AS2	Mid-term examination	20	

Aims

Ecology is an applied science that studies the relationship between living things and their natural social environment. It mainly studies the structure, function, regulation and management of the ecosystem composed of organisms and their environment. The module aims to provide students with an understanding of the general knowledge, theories and methods of ecology; and provides the opportunity to apply the principles and methods of ecology to analyse the resources and ecological

problems of the ecosystem and the ways of system optimisation.

Learning Outcomes

After completing the module the student should be able to:

1	Examine the structural and functional characteristics of the ecosystem, and to clarify the characteristics and interrelationships of the natural environment, artificial environment and biological components on the whole system.
2	Explain the principles of ecology, and discuss the theory and technology of building efficient ecosystem.
3	Examine the core of ecosystem biology, study the interaction and interaction rules between organisms and environment from individual, population and community level, and discuss the theory and technology of establishing reasonable biological structure.
4	Analyse the three levels of ecosystem regulation, and discuss the regulation mechanism and technical points.
5	Discuss the development track of agroecosystem, the classification and characteristics of agricultural resources, and the main ways of environmental pollution. Discuss the principle and main technology of ecological agriculture in China.

Learning Outcomes of Assessments

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

Exam	1	2	3	4	5
Test	1	2	3	4	5
Exam	1	2	3	4	5

Outline Syllabus

The main contents of the module include the structure of ecosystem, the function of ecosystem - energy flow, the logistics of ecosystem, the information and capital flow of ecosystem, resource utilisation and environmental protection, the ecological track of development, and ecological agriculture in China.

Learning Activities

The module content will be delivered through lectures.

Notes

The module is designed for students to study the structure, function, regulation and management of the ecosystem composed of organisms and their environment.