

Liverpool John Moores University

Title: Animal Infectious Disease prevention and Control
Status: Definitive
Code: **6505YAUZOO** (127923)
Version Start Date: 01-08-2021

Owning School/Faculty: Biological and Environmental Sciences
Teaching School/Faculty: Yunnan Agricultural University

| Team | Leader |
|-----------------|--------|
| Rachael Symonds | Y |

Academic Level: FHEQ6
Credit Value: 10
Total Delivered Hours: 24
Total Learning Hours: 100
Private Study: 76

Delivery Options

Course typically offered: Semester 1

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 24 |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|-------------------|---|---------------|---------------|
| Report | Report | Coursework report covering all lecture material | 70 | |
| Test | Test | In class test covering all lecture material | 30 | |

Aims

This course mainly introduces the background, principle, method and application of biological technology used in the process of animal epidemic disease prevention and control, including gene diagnosis technology, high-tech vaccine, antibody engineering, antiviral shear virus ribozyme technology, antisense nucleic acid technology, drug molecular design, protein engineering, animal disease resistance breeding and other technologies, and analyses its existing problems and development.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand and master the principles, methods, applications, existing problems and prospects of biotechnology used in the process of animal epidemic disease prevention and control.
- 2 Understand practical operation skills in animal disease prevention and control, and gain an understanding of innovations and technology in this subject.

Learning Outcomes of Assessments

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

| | | |
|--------|---|---|
| Report | 1 | 2 |
| Test | 1 | 2 |

Outline Syllabus

The main content of the course is biotechnology applied in the process of animal epidemic disease prevention and control, focusing on nucleic acid probe technology, PCR technology, genetic engineering vaccine and antibody engineering. Not only make students master the above technology and methods, but also make students understand the problems and application prospects of the above methods, so as to cultivate students' innovation awareness and ability.

Learning Activities

The module content will be delivered through lectures, coursework and a final exam, to promote the achievement of learning goals.

Notes

This module is for students who want to gain an understanding of the biotechnology technologies involved in animal disease control.