## 99-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	動物細胞培養與實驗	Serial No. / ID	0844 / MBI3010
Dept.	分子生物科技學系	School System / Class	大學日間部3年1班
Lecturer	李泰林	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	( <del>-</del> )234 / J519	Language	Chinese

## Introduction

The animal cell culture is to teach student to handle a cell line and introduce recombinat genes into cell. As a result, student can establish technic ability in their career and further study.

## **Outline**

- 1. Introduce the animal cell culture facilities and medium preparation
- 2. Contamination preventing
- 3. Differentiation
- 4. Subculture: detach the 293T cells by trypsin
- 5. Tumorigenesis assay by soft agar
- 6. Mycoplasma dentification
- 7. Determination of cell cytotoxicity by MTT test
- 8. Cell freezing and cell thawing
- 9. Middle-term examination
- 10. Genomic DNA isolation
- 11. RNA isolation
- 12. Maxi plasmid preparation
- 13. Introduce Plasmid DNA into mammalian cells: Ca phosphate precipitation
- 14. Introduce Plasmid DNA into mammalian cells: PEI trasfection
- 15. Heterologus gene expression: SDS-PAGE
- 16. Heterologus gene expression: Western blotting
- 17. Heterologus gene expression: reporter gene assay
- 18. Final examination

## Prerequisite

Biology