## **Basic Biotechnology**

Spring, 2014 (2/5/2014 updated)

**Time:** Thursday, 10:10~12:00 A.M.

**Place:** Room 5761, 3<sup>rd</sup> floor, Department of Medical Laboratory Science and Biotechnology,

National Cheng Kung University Medical College

Coordinator: Li-Jin Hsu, Ph.D. (hsu.lijin@gmail.com; ext. 5765)

Room 5765, Department of Medical Laboratory Science and Biotechnology

## **References:**

- 1) David P. Clark & Nanette J. Pazdernik, *Biotechnology: Academic Cell Update Edition*, 1<sup>st</sup> ed., 2011
- 2) William J. Thieman & Michael A. Palladino,  $\it Introduction\ to\ Biotechnology, 2^{nd}\ ed., 2008$

**Grading Policy:** Mid-term Exam 45%, Final Exam 45%, Performance 10%.

<b>Date</b>	<u>Time</u>	<b>Topic</b>	<u>Lecturer</u>
2/20	10:10~12:00	Laboratory animals	蔡佩珍
2/27	10:10~12:00	Cultivation of mammalian cells	徐麗君
3/6	10:10~11:00	Growing microorganisms	蔡佩珍
	11:10~12:00	Gel electrophoresis	傅子芳
3/13	10:10~12:00	Expression of recombinant proteins	楊孔嘉
3/20	10:10~12:00	Recombinant virus technology	楊孔嘉
3/27	10:10~12:00	Bioimaging & biosensors	張權發
4/10	10:10~12:00	Glycomics	張權發
		DNA and protein arrays	
4/17	10:10~12:00	Mid-term exam	徐麗君
4/24	10:10~12:00	Gene cloning and manipulation (I)	徐麗君
5/1	10:10~12:00	Gene cloning and manipulation (II)	徐麗君
5/8	10:10~12:00	Gene transfer	徐麗君
5/15	10:10~12:00	Gene silencing	徐麗君
5/22	10:10~12:00	Preparation and application of monoclonal antibody	葉才明
5/29	10:10~12:00	Research methods in immunology	徐麗君
6/5	10:10~12:00	Transgenic and gene knockout animals	徐麗君
6/12	10:10~12:00	Presentation	徐麗君
6/19	10:10~12:00	Final exam	徐麗君