

Basic Biotechnology

Spring, 2018 (1/26/2018 updated)

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

Place: Room 5761, 3rd 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*, 1st ed., 2011
- 2) William J. Thieman & Michael A. Palladino, *Introduction to Biotechnology*, 3rd ed., 2012

Grading Policy: Midterm Exam 40%, Final Exam 30%, Presentation & Performance 20%,
Report 10%.

<u>Date</u>	<u>Time</u>	<u>Topic</u>	<u>Lecturer</u>
3/1	10:10~12:00	1. Introduction	徐麗君
3/8	10:10~12:00	2. Laboratory animals	蔡佩珍
3/15	10:10~12:00	3. Cultivation of mammalian cells	徐麗君
3/22	10:10~11:00	4. Growing microorganisms	陳呈堯
	11:10~12:00	5. Gel electrophoresis	傅子芳
3/29	10:10~12:00	6. Expression of recombinant proteins	楊孔嘉
4/12	10:10~12:00	7. Recombinant virus technology	楊孔嘉
4/19	10:10~12:00	8. Bioimaging and biosensors	張權發
4/26	10:10~12:00	9. Glycomics	張權發
		10. DNA and protein arrays	
5/3	10:10~12:00	<i>Midterm exam (topics 1-10)</i>	徐麗君
5/10	10:10~12:00	11. Preparation and application of monoclonal antibody	葉才明
5/17	10:10~12:00	12. Gene cloning and manipulation (I)	徐麗君
5/24	10:10~12:00	13. Gene cloning and manipulation (II)	徐麗君
5/31	10:10~12:00	14. Gene transfer	徐麗君
6/7	10:10~12:00	15. Gene silencing and editing	徐麗君
6/14	10:10~12:00	16. Transgenic and gene knockout animals	徐麗君
6/21	10:10~12:00	Presentation	徐麗君
6/28	10:10~12:00	<i>Final exam (topics 11-16)</i>	徐麗君