

LIFS 2070: Introduction to Biotechnology (Fall 18/19)

Lecturers: Prof Raymond W. K. Wong (Course Director) Rm 5520 (bcwkrw@ust.hk)
 Prof Karl Tsim Rm 5456 (botsim@ust.hk)
 Prof Joseph Wong Rm 5454 (botin@ust.hk)

Time & Venue: Monday 9:00 – 10:20 LTC
 Wednesday 9:00 – 10:20 LTC

References: Introduction to Biotechnology Thieman et al 2013 Pearson
 Biotechnology Fundamentals Khan, 2016 CRC Press
 Yahoo; Google

Course goals:

This course will provide students with a general understanding and recognition of fundamental subjects in biotechnology and is particularly aimed at students who are interested in declaring major or minor in Biotechnology.

Learning Outcomes:

On successful completion of this course, students are expected to be able to:

1. Understand the basic concepts of biotechnology and how this is related to our daily life.
2. Evaluate and analyse information relevant to biotechnology issues.
3. Communicate and explain information regarding issues and importance of biotechnology to general public.
4. Recognize how biotechnology can help resolve healthcare issues and develop a sustainable society.
5. Use a global perspective to analyze issues related to life science and biotechnology.

Mid-term Assessment: 33% X 2
 Final Examination: 34%

	Date	Topic	Instructor
1	3-Sept-18 (Mon)	Introduction to biotechnology	Tsim
2	5-Sept-18 (Wed)	The history of biotechnology	Tsim
3	10-Sept-18 (Mon)	Outstanding scientific discoveries	WK Wong
4	12-Sept-18 (Wed)	Biotechnology Business in Hong Kong/China	Rocky Law
5	17-Sept-18 (Mon)	Biotechnology- Testing industry in Hong Kong	Wong (CTC)
6	19-Sept-18 (Wed)	Molecular foundation of biotechnology	Tsim
7	24-Sept-18 (Mon)	Biotechnology tools in research & development	Tsim
8	26-Sept-18 (Wed)	Midterm 1 (33%) – [7 lectures, No. 1-7]	Tsim
9	3-Oct-18 (Wed)	Technological approaches and achievements in animal, plant, and algal biotechnology	J Wong

10	8-Oct-18 (Mon)	Technological approaches and achievements in animal, plant, and algal biotechnology	J Wong	
11	10-Oct-18 (Wed)		J Wong	
12	15-Oct-18 (Mon)		J Wong	
13	22-Oct-18 (Mon)		J Wong	
14	24-Oct-18 (Wed)		J Wong	
15	29-Oct-18 (Mon)		J Wong	
16	31-Oct-18 (Wed)	Midterm 2 (33%) – [7 lectures, No. 9-15]	J Wong	
17	5-Nov-18 (Mon)	Applications of biotechnology	WK Wong	
18	7-Nov-18 (Wed)		WK Wong	
19	12-Nov-18 (Mon)		WK Wong	
20	14-Nov-18 (Wed)		WK Wong	
21	19-Nov-18 (Mon)		WK Wong	
22	21-Nov-18 (Wed)		WK Wong	
23	26-Nov-18 (Mon)		Legal and ethical issues in biotechnology	WK Wong
24	28-Nov-18 (Wed)			WK Wong
25	to be announced	Final Exam (34%) – [8 lectures No. 17-24]	WK Wong	

Final Examination (34%) – Date and Venue to be announced by ARRO