

LIFS 2070: Introduction to Biotechnology (Fall 17/18)

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 10:00 – 11:50 LTJ
Wednesday 10:30 – 11:50 LTJ

References: Introduction to Biotechnology Thieman et al 2014 Pearson
Biotechnology Fundamentals Khan, 20145 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 analyze 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: 33%

	Date	Topic	Instructor
1	4-Sept-17 (Mon)	Introduction to biotechnology	Tsim
2	6-Sept-17 (Wed)	The history of biotechnology	WK Wong
3	11-Sept-17 (Mon)		Tsim
4	13-Sept-17 (Wed)		Tsim
5	18-Sept-17 (Mon)	Molecular foundation of biotechnology	Tsim
6	20-Sept-17 (Wed)	Testing and Certification Industry in Hong Kong	Tsim/CTC
7	25-Sept-17 (Mon)	Biotechnology tools in research & development	Tsim
8	27-Sept-17 (Wed)	Biotech company in Hong Kong and China	Tsim
9	4-Oct-17 (Wed)	Midterm 1 (33%) – [8 lectures No. 1-8]	Tsim
10	9-Oct-17 (Mon)		J Wong

11	11-Oct-17 (Wed)	Technological approaches and achievements in animal, plant, and algal biotechnology	J Wong
12	16-Oct-17 (Mon)		J Wong
13	18-Oct-17 (Wed)		J Wong
14	23-Oct-17 (Mon)		J Wong
15	25-Oct-17 (Wed)		J Wong
16	30-Oct-17 (Mon)		J Wong
17	1-Nov-17 (Wed)	Midterm 2 (33%) – [7 lectures, No. 10-16]	J Wong
18	6-Nov-17 (Mon)	Healthcare application Legal and policy issue in biotechnology Ethical issues in biotechnology	WK Wong
19	8-Nov-17 (Wed)		WK Wong
20	13-Nov-17 (Wed)		WK Wong
21	15-Nov-17 (Mon)		WK Wong
22	20-Nov-17 (Wed)		WK Wong
23	22-Nov-17 (Mon)		WK Wong
24	27-Nov-17 (Wed)		WK Wong
25	29-Nov-17 (Mon)		WK Wong
26	to be announced	Final Exam (33%) – [8 lectures No. 18-25]	WK Wong

Final Examination (33%) – Date and Venue to be announced by ARRO