

LIFS 1902 General Biology II

Course Outline – Fall 2022

1. Instructors

	Office	Phone	Email
Prof. Chun LIANG (Course Coordinator)	Room 5524	23587296	bccliang@ust.hk
Prof. Andrew L. MILLER	Room 5453	23588631	almiller@ust.hk
Dr. Amy L. LI	Room 5462	23587278	amylaamli@ust.hk

2. Meeting Time and Venue

Date/Time: Mondays and Wednesday, 09:00 – 10:20

Venue: LT-B (near Lift 19)

3. Course Description

Credit points: 3

Pre-requisite: LIFS1901 OR level 3 or above in HKDSE 1x Biology OR a passing grade in AL/AS Biology

Grading: A+ to F

Brief information/synopsis:

This course targets science students who have acquired basic knowledge in fundamental biology through HKDSE Biology, LIFS1901, or another biology course/program at the equivalent level. It functions as a bridging course to prepare the students for further study in life science. Its focus is on basic and general aspects of genes and cellular processes, genetics, human biology and physiology, and biotechnology. Current examples will be used as well to relate the knowledge to real life issues.

4. Intended Learning Outcomes

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

No.	ILOs
1	Explain the basic structures and life processes in organisms.
2	Explain basic inheritance of traits and gene expression in humans.
3	Explain basic biotechnologies and discuss their impacts on human lives.
4	Discuss the relevance of life science to the study of humans as a living organism.

5. Assessment Scheme

Assessment	Assessing ILOs
Mid-term exam (50%)	1, 2, 3, 4
Final exam (50%)	1, 2, 3, 4

6. Student Learning Resources

Lecture notes

Textbook: *Inquiry into Life*, 16th/17th ed. By Sylvia S. Mader; McGraw Hill

7. Course Schedule

No. of lectures	Date	Topic (Relevant chapter in the textbook)	Instructor
2	5, 7 Sep	Course Introduction and Nervous system (17)	Miller
1.5	14, 19 Sep	Musculoskeletal System (19)	Miller
1.5	19, 21 Sep	Heart and the Circulatory system (12)	Miller
2	26, 28 Sep	Respiratory system (15)	Miller
1	3 Oct	Osmoregulation and Excretion (16)	Miller
3	5, 10, 12 Oct	DNA structure and gene expression (25)	Liang
1.5	17, 19 Oct	Patterns of gene inheritance (23)	Liang
1.5	19, 24 Oct	Chromosomal basis of inheritance (24)	Liang
	26 Oct	Mid-term exam (covers lectures up to “Patterns of gene inheritance”)	
2	31 Oct, 2 Nov	Biotechnology (26)	Liang
2	7, 9 Nov	Digestive System and Nutrition (14)	Li
2	14, 16 Nov	Endocrine System (20)	Li
2	21, 23 Nov	Lymphatic and Immune Systems (13)	Li
2	28, 30 Nov	Development and Aging (22)	Li
	TBA	Final exam (covers lectures from “Chromosomal basis of inheritance”)	