

LIFS1902 General Biology II

Course Outline-Spring Semester 2018-19

1. Instructors

Instructor	Office	Extension	E-mail address
Prof. Andrew Miller (Course Co-ordinator)	Room 5453	x8631	almiller@ust.hk
Prof. Raymond Wong	Room 5446	x7271	bcrayw@ust.hk
Dr Sarah Ho	Room 6236	X8017	barnie@ust.hk
Dr. Jessica Tang	Room 4218	x7314	bocemun@ust.hk

2. Meeting Time and Venue

Lectures:

Date/Time: Wed and Fri 13:30-14:50

Venue: LTJ

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

Exclusion: NIL

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 human biology, biotechnology and human impacts on the environment. Relevant examples will be used to relate the knowledge to real life issues.

4. Intended Learning Outcomes

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

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

5. Assessment Scheme

- a. Mid-term duration 1hour 10 minutes
- b. Final Examination duration: 2 hours

Assessment

Mid –term (40%)

Final Exam (60%)

Assessing Course ILOs

ILO: 1, 2, 3, 4

ILO: 1, 2, 3, 4

6. Student Learning Resources

Lecture notes

Recommended reading: Inquiry into Life, 15th ed. By Sylvia S. Mader (2017) McGraw Hill

Print book HKD 423

E book HKD 240 (license for one semester)

7. Teaching and Learning Activities

Scheduled activities: Two 80-minute lectures per week

8. Course Schedule

Date	Topic (Relevant chapter in the textbook)	Instructor
30 Jan	Digestion and Nutrition (Chapter 14)	Wong
1 Feb	Digestion and Nutrition (Chapter 14)	Wong
8 Feb	Lymphatic, immune system & infectious diseases (Chapter 13)	Wong
13 Feb	Lymphatic, immune system & infectious diseases (Chapter 13)	Wong
15 Feb	The urinary system and the anatomy of the kidney (Chapter 16.1 and 16.2)	Miller
20 Feb	The regulation and function of the kidney and disorders of the kidney (Chapters 16.3 and 16.4)	Miller
22 Feb	Muscle anatomy and contraction (Chapter 19.3, 19.4, and 19.5)	Ho
27 Feb	Cardiovascular system (Chapter 12)	Miller
1 Mar	The respiratory system (Chapter 15.1)	Miller
6 Mar	The mechanism of breathing (Chapter 15.2)	Miller
8 Apr	Biotechnology (Chapter 26) (not examined in Mid-term)	Tang
13 Mar	Biotechnology (Chapter 26) (not examined in Mid-term)	Tang
15 Mar	Mid term	Miller/Ho/Wong
20 Mar	Nervous system (Chapter 17)	Tang
22 Mar	Nervous system (Chapter 17)	Tang
27Mar	Endocrine regulation (Chapter 20)	Tang
29 Mar	Endocrine regulation (Chapter 20)	Tang
3 Apr	Reproduction (Chapter 21)	Tang
10 Apr	Reproduction (Chapter 21)	Tang
12 Apr	Development & aging (Chapter 22)	Tang
17 Apr	Development & aging (Chapter 22)	Tang
24 Apr	Human genetics – patterns of gene inheritance (Chapter 23)	Tang
26 Apr	Human genetics – patterns of gene inheritance (Chapter 23)	Tang
3 May	Human genetics – chromosomal basis of gene inheritance (Chapter 24)	Tang
8 May	Human genetics – Chromosomal basis of gene inheritance (Chapter 24)	Tang