

# LIFS 1902 General Biology II

## Course Outline-Fall 2019

### 1. Instructors

Instructors	Office	Extension	E-mail address
Prof. Chun LIANG (Course Coordinator)	Room 5524	x7296	<a href="mailto:bccliang@ust.hk">bccliang@ust.hk</a>
Prof. Raymond SC WONG	Room 5446	x7271	<a href="mailto:bcrayw@ust.hk">bcrayw@ust.hk</a>
Prof. Andrew L MILLER	Room 5453	x8631	<a href="mailto:almiller@ust.hk">almiller@ust.hk</a>

### 2. Meeting Time and Venue

**Date/Time:** Wednesday and Friday, 15:00 – 16:20

**Venue:** LT-A

### 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 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

a. Mid-term Examination duration: 2 hrs

Final Examination duration: 3 hrs

b. Percentage of coursework, examination, etc.:

Assessment

Mid-term Exam (50%)

Final Exam (50%)

Assessing Course ILOs

ILO: 1, 2, 3, 4

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## 6. Student Learning Resources

Lecture notes

Textbook: *Inquiry into Life*, 14<sup>th</sup>/15<sup>th</sup> ed. By Sylvia S. Mader; McGraw Hill

**Textbook: about HK\$505 after student discount (Sell at campus bookstore)**

**Textbook + Connect Plus: HK\$515 after student discount (Sell at campus bookstore)**

**Connect Plus (With ebook): US\$38.5 per code**

**SmartBook: US\$31 per code**

**LearnSmart: US\$16.5 per code.**

## 7. Course Schedule

No. of lectures	Date	Topic (Relevant chapter in the textbook)	Instructor
2	4, 6 Sep.	Course Introduction and Nervous system (17)	Miller
1.5	11, 13 Sep.	Musculoskeletal System (19)	Miller
1.5	13, 18 Sep.	Heart and the Circulatory system (12)	Miller
2	20, 25 Sep.	Respiratory system (15)	Miller
1	27 Sep.	Osmoregulation and Excretion (16)	Miller
2	2, 4 Oct.	Digestive system (14) and Endocrine System (20)	Wong
2	9, 11 Oct.	Nutrition and Diseases (14)	Wong
1	16 Oct.	Make-up lecture (if any) and /or Q & A	Miller/Wong
	18 Oct. (7-9 pm)	Mid-term exam (covers lectures from 4 Sep. to 16 Oct.). (No lecture at 15:00-16:20 on 18 Oct., or arranged later)	Miller /Wong
3	23, 25, 30 Oct.	DNA structure and gene expression (25)	Liang
1.5	1, 6 Nov.	Patterns of gene inheritance (23)	Liang
1.5	6, 8 Nov.	Chromosomal basis of inheritance (24)	Liang
2	13, 15 Nov.	Biotechnology (26)	Liang
2	20, 22 Nov.	Lymphatic and Immune System (13)	Wong
2	27, 29 Nov.	Aging (Human Development) (22)	Wong
	tba	Final exam (covers lectures from 23 Oct. – 29 Nov.)	Liang/Wong