

**Division of Life Science**  
**The Hong Kong University of Science and Technology**

**LIFS 1930 Nature of Life Sciences**

Fall semester, 2023-2024

Credits: 3

Course coordinator	Dr. Jessica Tang	
Instructors	Dr. Jessica Tang	bocemun@ust.hk, x7314
	Dr. Philip Lam	ylam@ust.hk, x8714
	Dr. Ice Ko	iceko@ust.hk, x8923

**Course Goals**

This is an innovative blended-learning course that comprises both independent e-learning and online face-to-face tutorial components. The course covers general and up-to-date topics such as conservation biology, biodiversity, metabolism, cell signaling in Biochemistry, recombinant DNA, animal and plant biotechnology, and bio-ethics.

**Intended Learning Outcomes**

At the end of this course, students will be able to:

- Acquire fundamental knowledge through computer-assisted learning in the areas of biochemistry, biology, and biotechnology.
- Cultivate self-paced practice, feedback, and monitoring of self-progress.
- Inaugurate global connection.
- Utilize in-class game-based / case study activities to reinforce online learning.
- Develop higher-order skills in order to make critical and rational judgments over societal concerns in life sciences.
- Seek and share biological knowledge, independently and in collaboration with others.

## Assessment Scheme

Components	Percentage
Online quiz	10
Participation mark#	10
Written assignment *	20
Final examination	60

Note:

#5% deduction will be made if more than 2 no-shows after add/drop period.

Active participation in all classes attended is expected. An extra 5% deduction will be made if there is no active participation in the attended classes.

\*Each student is required to write a 400-word essay on one of the assigned topics. Topics are related to the content of the face-to-face tutorials. The assignment topics will be announced on **November, 15th 2023**.

## Class Outline

Tutorials (Each student is assigned to attend one of the following sessions arranged by ARO, please check your course registration information):

LIFS1930 (T1) Wednesday 12:00-13:20; Rm 4582 (Lift 29/30)

LIFS1930 (T2) Wednesday 9:00-10:20; Rm 4582 (Lift 29/30)

Date	Topic	Instructor
Sep 6	No class	
Sep 13	Transcription and Translation	Tang
Sep 20	Stem Cells	Tang
Sep 27	Recombinant DNA	Tang
Oct 4	Animal Biotechnology	Tang
Oct 11	Plant Biotechnology	Tang
Oct 18	Animal Form and Function	Lam
Oct 25	Cell Signaling	Lam
Nov 1	Metabolism and Nutrition	Lam
Nov 8	Evolution	Ko
Nov 15	Ecology	Ko
Nov 22	Conservation Biology	Ko
Nov 29	Bio-ethics and Public Acceptance	Ko