

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

LIFS 1930 Nature of Life Sciences

Spring semester, 2017-2018

Credits: 3

Exclusion: LIFS 2030 (prior to 2014-15)

Course coordinator	Dr. Philip Lam	
Instructors	Dr. Jessica Tang	bocemun, x7314
	Dr. Philip Lam	ylam, x8714
	Dr. Melody Leung	bomleung, x8634
	Dr. Helen Cheung	cheungh, x7904

Course goals

This is an innovative blended-learning course that comprises both independent e-learning and face-to-face tutorial components. The course covers general and up-to-date topics such as conservation biology and animal forms and functions in the field of Biology, metabolism and cell signaling in Biochemistry, and recombinant DNA, animal and plant biotechnology and bioethics in Biotechnology.

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.
- To cultivate self-paced practice, feedbacks and monitoring of self-progress.
- To be able to inaugurate global connection.
- To be able to utilize in-class game-based / case study activities to reinforce on-line learning.
- To develop higher order skills in order to make critical and rational judgments over societal concerns in life sciences.
- To seek and share biological knowledge, independently and in collaboration with others.

Assessment scheme

Components	Percentage
On line quiz	20
Written assignment *	20
Final examination 1.5 hours	60

*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 tutorial. The assignment topics will be announced on 26th Apr 2018.

Class outline

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

T2 Wednesday 10.30-11.50 Rm4582

T1 Wednesday 15.00-16.20 Rm4582

Date	Topic	Instructor
7 Feb	Biodiversity and Evolution	Tang
14 Feb	Ecology	Tang
21 Feb	Conservation Biology	Tang
28 Feb	Animal Form and Function	Lam
7 Mar	Cell Signaling	Lam
14 Mar	Metabolism and Nutrition	Lam
21 Mar	Transcription and Translation	Cheung
28 Mar	Stem Cells	Leung
11 Apr	Recombinant DNA	Cheung
18 Apr	Animal Biotechnology	Cheung
25 Apr	Plant Biotechnology	Leung
2 May	Bio-ethics and Public Acceptance	Leung