LIFS1901 General Biology I Spring 2018

Course Description:

This course targets science students not having sufficient biological knowledge for the entry to a life science program of a 4-year undergraduate curriculum. It provides students with a general overview of fundamental biology: basic characteristics of life (the chemistry of life, cells), vital life processes (respiration, photosynthesis), and essential concepts of genetics, evolution, and ecology. **Credit Points:** 3

Intended Learning Outcomes (ILOs):

On successful completion of this course, students are expected to be able to:
1. describe the basic characteristics of life and its composite units
2. describe the interactions of organisms with each other and with the physical environment, taking particular account of energy source, the survival of individuals and the survival of a group.
3. apply the basic knowledge of the characteristics of life and the interactions of organisms to explain essential life processes.
4. illustrate how life science provides an investigative approach to interpreting the natural world.

Weekly Meeting Time & Venue:

Tue 16:30-17:50 LT-C
Thu 16:30-17:50 LT-C

Course Schedule:

Topics	**Dates**
(1) Course Introduction & Unique Functions of Living Things	Feb 1
(2) Chemical Nature of Living Things	Feb 6, 8, 13, 15
(3) Spatial Definition of an Organism	Feb 20, 22
(4) Self Material Production & Energy Acquisition by Living Things	Feb 27, Mar 1
(5) Determination of Form & Function of an Organism	Mar 6, 8
Mid-Term Exam	***Mar 13 (16:30-17:50, LT-C)***
(6) Making of a New Life	Mar 15, 20, 22
(7) Differences among Living Individuals	Mar 27, 29
(8) Variety of Living Things on Earth ***Individual Project (Online Submission)***	Apr 10, 12, 17, 19, 24 ***Apr 29 (23:59)***
(9) Interactions within Living Systems	April 26, May 3, 8

Student Learning Activities:

Attending lectures, asking and answering questions, working on end-of-topic review questions and the individual project

Student Learning Resources:

Lecture notes, lecture videos, end-of-topic review question sets, any textbooks for university/college-level introductory biology or high-school level biology as references (example: Inquiry into Life, Mader & Windelspecht, McGraw Hill), biology-related resources in libraries and media

Assessment Scheme:

Mid-Term Exam (30%), assessing ILO 1
Individual Project (10%), assessing ILO 4
Final Exam (60%), assessing ILOs 1, 2 & 3

Instructor:

Dr. Eugene S.C. HUNG (bohsc@ust.hk, x7303, Room 5451)