

Course Title	: Life Sciences: the way life works
Course Code	: CLD9008
Recommended Study Year	: Unrestricted
No. of Credits	: 3 credits
Mode of Tuition	: Sectional
Class Contact Hours	: Two 1.5 hour sessions per week, 14 weeks
Category	: Core Curriculum (Science, Technology, and Society Cluster)
Prerequisite	: None
Teaching Language	: English

Time: tbc

Instructors: Ken So

Office Location: NAB116

Location: tbc

e-mail: scienceunit@ln.edu.hk

Office Hours: tbc

Brief Course Description:

This course gives a brief introduction to the Origin of Life and provides an understanding of the physical conditions that enable planet Earth to create and sustain life. A practical approach will be adopted to arouse the curiosity and interest of the students in the subject in order to stimulate critical scientific thinking. The course addresses the basic chemistry and biochemistry of vital components for the living cell. The course explains the role and functions of the various organs and organelles in plants and animals. It engages students in open discussion on the socio-cultural-religious impact of the theories of evolution, reproduction and bio-engineering. This course selects certain important topics that have a great impact locally and with possible global consequences. The course instills literacy in bio-science by broadening the scope of the students' knowledge in biology and will enable students to address issues on life competently and with confidence.

Learning Outcomes:

Upon completion of this course, a fully-engaged student will be able to:

1. Identify, describe, and apply basic biological concepts.
2. Discuss and debate controversial aspects that are related to biology
3. Carry out basic experiments and be able to draw conclusions from observation.
4. Demonstrate their science literacy in writing and discussions.
5. Articulate biological concepts and the linkages to daily life to a general audience

Assessment:

Participation	10%
Class tests (2 tests/term)	50%
Reflection	15%
Group Project	
Paper summary	10%
Poster	10%
Group participation (measured by group members)	5%

Final Grade:

With the move towards criterion-referenced assessment, your cumulative score will determine your final grade.

A range (100-90), B range (89-80), C range (79-70), D range (69-60), F (<60)

Test Policy:

If you miss the test due to some medical emergency, contact me as soon as possible. You will only be able to take a make-up test if you have a doctor's note. Depending on the situation, there will be an automatic deduction of 10-20%.

Reading List (selected topics):

1. *Campbell Biology (11th edition)*, LA Urry, ML Cain, SA Wasserman, PV Minorsky, JB Reece. Pearson Publisher, 2016
2. *Biology*, C Rye, R Wise, V Jurukovski, J DeSaix, J Choi, Y Avissar. OpenStax, 2017.
3. *Concepts of Biology*, S Fowler, R Roush, J Wise. Open Stax, 2016.
4. *The Way Life Works*, M Hoagland and B Dodson, Times Books, 1995
5. *The story of Life* TRE Southwood, Oxford University Press, 2003.