

Course Description: This is a practical course accompanying the lecture course LIFS1901 General Biology I. It provides students with some basic concepts and some hands-on experience in biological investigation within the areas covered by LIFS1901. The emphasis is on the understanding and application of the scientific principles underlying the experimental designs and procedures. **Co-requisite:** LIFS1901 General Biology I **Credit Point:** 1 **Grading:** Pass/Fail

Intended Learning Outcomes (ILOs): On successful completion of this course, students are expected to be able to:

1. explain the scientific principles underlying the experimental procedures described in various laboratory sessions;
2. demonstrate some basic laboratory techniques for carrying out the life science experiments described in various laboratory sessions;
3. apply scientific reasoning and knowledge to analyze and interpret experimental data;
4. apply appropriate ethical principles to practical laboratory work and data interpretation.

Weekly Meeting Time & Venue: Mon 1:30-4:20 pm Room 4160 (Life Science Teaching Lab)

Course Schedule:

Week	Date	Content
1	Sep 4	Course introduction
2	Sep 11	Lab 1: Use of basic instruments
3	Sep 18	Lab 2: Basic microscopy
4	Sep 25	Quiz on Labs 1 and 2
5	Oct 2	<Holiday: No class>
6	Oct 9	Lab 3: Cell permeability & osmosis
7	Oct 16	Lab 4: Plant leaves & pigments
8	Oct 23	<Holiday: No class>
9	Oct 30	Quiz on Labs 3 and 4
10	Nov 6	Lab 5: Nucleic acid isolation
11	Nov 13	Quiz on Lab 5
12	Nov 20	Lab skills test
13	Nov 27	TBA

Student Learning Activities: Reading course instructive materials, observing laboratory demonstrations, performing laboratory experiments, taking quizzes, writing lab reports & exploring relevant materials from other resources.

Student Learning Resources: Course instructive materials provided on Canvas, textbook for LIFS1901, library and internet-based resources

Assessment Tasks: Lab reports, online quizzes (assessing ILOs 1, 3 & 4) & lab skills tests (assessing ILO 2). A student must pass ALL assessment tasks to get a pass in this course.

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

Technologists: Mr. Yau Ming WONG (bovge@ust.hk), Ms. Joy CHAN, Mr. Jason TAM

Teaching Assistants: Miss Shiwen CHEN, Mr. Tran Dang Khoi LE, Mr. Tianlun LEI, Mr. Yunyang LI, Mr. Yi QIAO, Miss Ruiyi SUN, Mr. Chen YANG, Mr. Haoran YIN, Miss Bonan ZHANG, Mr. Sihan ZHANG