



# SISP 1113

## Human Body and Diseases

### Course Description

This course aims to provide an overview of the structure and function of the human body. Fundamental principles of bioscience such as cell biology, anatomy, and physiology will be introduced. The relationship between human health and the environment will be discussed. We will also analyze factors that disrupt normal body functions, explore mechanisms of disease, and learn about the prevention of diseases through the control of risk factors. From the physiological and anatomical perspective, students will be guided to analyze the marvels and limitations of the human body, and what they would do if they are to 're-design' it. Students can also try to design, conceptualize or build prototypes of devices that can be beneficial to human well-being or prevent diseases.

### Topics

- Organization of the Human Body
- Fundamental Principles of Bioscience on Cell Biology, Anatomy, and Physiology
- Pathogens and our Immune System
- Environment and Human Disease
- Contemporary Health issues and Recent Advances in Disease Prevention

### Grading Scheme

- In-class participation (15%)
- Quizzes x2 (10%)
- Group Presentation (20%)
- Final Examination (55%)

[Topics and grading schemes are subject to change as deemed appropriate. Students will receive information and guidelines in class on how they will be assessed for the course.]

### Teaching Mode

The course will be delivered face-to-face.

### Attendance Requirement

Attendance is expected and required. The minimum attendance required is 70%. Attendance for the assessment activities [e.g. group presentation and final exam] is mandatory.

### Instructor(s) Profile

#### **Dr. Philip LAM**

Dr. Lam received his Ph.D. in Molecular Pharmacology and Toxicology from the University of Southern California, USA. He is currently a Lecturer at the Division of Life Science, HKUST. He has years of substantial teaching experience. He is familiar with various new pedagogical strategies such as e-learning and blended learning. Dr. Lam believes that it is of utmost importance to provide students with a learning environment that nurtures critical thinking.