

Division of Life Science
The Hong Kong University of Science & Technology
LIFS 4760
Biochemistry of Diseases

Course Description

This course covers the clinical manifestation, physiology, pathophysiology and treatment of common human diseases, with focus on the underlying biochemical basis of the diseases and treatments. Prerequisite: LIFS1902/2040/2210. Credit Points: 3.

Intended Learning Outcomes

At the end of this course, students should be able to:

- Attain basic knowledge in the manifestations, physiology, pathophysiology and treatment of common human diseases.
- Appreciate the molecular mechanism underling common human diseases and treatments.
- Apply biochemistry knowledge and skills to interpret the pathogenesis of common diseases and evaluate the pros and cons of current treatments.

This course will also provide students with the opportunities to:

- Know the principles and applications of cutting-edge instrumentation and experimental design in deciphering and treating diseases.
- Appreciate the contributions of modern biological sciences to the society.
- Understand the fundamental values of ethical standards and academic integrity.

(2020 Fall Semester)

Date/Time:	Monday, Wednesday (10:30-11:50)	
Venue:	Online	
Course Coordinator:	Prof. Jun Xia	(Extn 7293, E-mail: jxia@ust.hk)

Date/Session	Lecture	Instructor
Sep 7	Introduction and a brief history of disease and medicine	JX
Sept 9, 14, 16, 21	Neurological diseases (Alzheimer's and Parkinson's Diseases)	JX
Sept 23, 28, 30	Psychiatric diseases (schizophrenia, depression and Autism)	JX
Oct 5	Mid-term exam	
Oct 7, 12, 14, 19	Cardiovascular diseases (hypertension and coronary heart disease)	JX
Oct 21, 28, Nov 2	Endocrine disorders (diabetes)	JX
Nov 4, 9, 11	Gastrointestinal diseases (peptic ulcers)	JX
Nov 16, 18, 23	Infectious diseases (AIDS and Flu/Cold)	JX
Nov 25, 30	Cancer	JX
Dec 2	Review session	JX

Final Exam (venue and date to be determined by ARR)

Final course grade will be a combination of scores from mid-term exam and final exam, taking consideration of respective lecture hours before and after mid-term exam.