

Section of Biochemistry and Cell Biology
Division of Life Science
The Hong Kong University of Science and Technology

LIFS 2820
Spring semester, 2016-2017
Instructor: Dr. Helen Cheung
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Course goals

To explain the theories and concepts behind the chosen experimental sessions designed for LIFS 2720.

Learning Outcomes

By the end of this course, you will be able to:

1. *Realize* what biochemistry is all about.
2. *Understand* how biochemical knowledge can be derived from experiments.
3. *Acknowledge* the background aims and principles of designated experiments arranged for the related practical course of LIFS 2720
4. *Expose* to basic mechanistic functions of common biochemical equipments.
5. *Recognize* the potential application(s) of various common biochemical equipments.

Course description

The course is designed to enable students to acquire a strong basis of biochemical principles established in the field of biochemistry. It is designed to introduce for first-year students to the underlying principles of essential biochemical techniques that have remained indispensable in experimental biochemistry.

Teaching approach

This course is primarily delivered through lectures. As learning is an active process, students are expected to review the relevant interactive self-dependent learning aids (SDLAs) prior to attending the lectures.

Assessment scheme

Performance is assessed at the end of the semester that contributes 100% to the course assessment.

Class outline

- 22-09-2016 Acidity and Alkalinity
- 29-09-2016 Ion exchange and thin layer chromatography
- 06-10-2016 Gel filtration chromatography
- 13-10-2016 Electrophoresis
- 20-10-2016 Enzyme kinetics
- 27-10-2016 Centrifugation
- 03-10-2016 DNA melting curve
- 10-10-2016 Metabolic syndrome I
- 17-10-2016 Metabolic syndrome II

Reference books

No standard textbook required.