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 indispensible 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.