

## COURSE DETAIL

### METABOLISM AND REGULATION

**Country**

Singapore

**Host Institution**

National University of Singapore

**Program(s)**

National University of Singapore

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Biological Sciences Biochemistry

**UCEAP Course Number**

121

**UCEAP Course Suffix****UCEAP Official Title**

METABOLISM AND REGULATION

**UCEAP Transcript Title**

METABOLISM&REGULATN

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

**Course Description**

This course is an overview of the biosynthesis and catabolism of carbohydrates, proteins, nucleic acids, and lipids in the context of human health and disease. Emphasis is on the integration and regulation of metabolic pathways in different tissues and organs. It covers principles of bioenergetics and mitochondrial energy metabolism, free radicals, mitochondrial DNA damage in aging, and neurodegenerative diseases.

**Language(s) of Instruction**

English

**Host Institution Course Number**

LSM3210

**Host Institution Course Title**

METABOLISM AND REGULATION

**Host Institution Campus****Host Institution Faculty****Host Institution Degree****Host Institution Department**

Biochemistry

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