COURSE DETAIL

BIOLOGICAL TREATMENT PROCESS

Country

Taiwan

Host Institution

National Taiwan University

Program(s)

National Taiwan University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Environmental Studies

UCEAP Course Number

132

UCEAP Course Suffix

UCEAP Official Title

BIOLOGICAL TREATMENT PROCESS

UCEAP Transcript Title

TREATMENT PROCESS

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course aims to provide understanding of the latest development in biological treatment processes. The course covers the following:

- 1. Introduction
- 2. Fundamentals of Microbiology
- 3. Biological Reaction and Reaction Kinetics
- 4. Reactor Design (1) Kinetic Model Development(2) Evaluation of Biokinetic Constants
- 5. Aerobic Suspend-Growth Process (1) Activated Sludge Process (2) Oxidation Ditch (3) Sequencing Batch Reactor
- 7. Aerobic Attached-Growth Treatment Methods
- 8. Anaerobic Treatment(1) Introduction(2) Anaerobic Sludge Digestion(3) Anaerobic Wastewater Treatment
- 9. Nitrogen and Phosphorous Removal Method

Language(s) of Instruction

English

Host Institution Course Number

EnvE7032

Host Institution Course Title

BIOLOGICAL TREATMENT PROCESS

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Environmental Engineering

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