



國立清華大學
NATIONAL TSING HUA UNIVERSITY

2020 NTHU Global Summer School

當代生命科學

Contemporary life science and your life

Lecturer: Dr. Yu-Chun Lin (林玉俊), Dr. Chuan-Chin Chao (焦傳金), Dr. Tsung-Han Kuo (郭崇涵)

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(郭崇涵)

Course time: 14pm-17pm on Mondays, Tuesdays, and Wednesdays of July 20th -22nd and 27th-29th July, 2020. Total six days.

Classroom: to be announced

Contact hours: 18 hours

Language: English

Credit Points: 1

Textbook: No textbook. The slides in the course will be provided.

Student Learning Objectives & Schedule:

Objectives:

This course aims to offer an introduction of several topics in life science, including cell therapy, biofuel, genetically-modified organisms (GMOs), genome editing, stem cells, body patterning of primates in ocean, animal social interaction, and so on. Moreover, the recent research and breakthroughs in the fields above will be also included. Upon completion of the courses, students will be able to know how to face the emerging impact on their own lives and also have basic knowledge to initial some multidisciplinary studies in the future.

Schedule:

1. 7/20 The future of life science: Synthetic Biology (Part I, basic introduction, Pharmaceutical discovery, Genome editing) (Dr. Yu-Chun Lin)
2. 7/21 The future of life science: Synthetic Biology (Part II, Cell therapy, GMO) (Dr. Yu-Chun Lin)
3. 7/22 The future of life science: Synthetic Biology (Part III, Biofuel, Artificial life, Ethic issues) (Dr. Yu-Chun Lin)
4. 7/27 Animal Social Interaction (Part I) (Dr. Tsung-Han Kuo)
5. 7/28 Animal Social Interaction (Part II) (Dr. Tsung-Han Kuo)
6. 7/29 Primates in ocean – Dynamic body patterning and number sense in cephalopods (Dr. Chuan-Chin Chao)