

## **Sustainable Development Syllabus**

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Office: Social Science North Building 8F

Office hour: by make appointments

Course Number: AN-157 永續發展

Credit: 1 credit

Class time: Please see the following course schedule

Classroom. 雲平大樓東棟 4 樓創新教學工坊

### **Course Description.**

永續發展該課程是 EMI 課程，安排了 10 個不同領域專家，有關永續發展的英文演講，所邀請了 10 位從不同專業領域來討論永續發展，他們闡述永續發展的面向，包括碳排放、生物技術、能源、永續山區發展、國際關係、生物多樣性、STEM 教育、水管理等的議題。以永續性科學的觀點來討論永續發展的觀念，教學期許引導學生能貫穿各個專業方面來認識永續發展。

This is a EMI course, which consists 10 different sustainable development speeches, and we invited 10 different speakers on various professional field. They will provide an overview of the concept of sustainable development, including a review of its underlying Emissions, Biotechnology, energy, Sustainable Mountain Development, International Relations, Biodiversity, STEM Education, waste and so on. Perspectives from sustainability science will be introduced. Throughout the conceptual points of sustainable development are illustrated with various professional aspects.

**Course schedule:**

| Date   | Time           | Lecturer             | Topic  |
|--------|----------------|----------------------|--|
| Sep 8  | 15:10----16:00 | Chun-Li Tsai         | Course Introduction  |
| Sep 15 | 15:10----16:00 | Remi Chauvy          | The Role of Carbon Capture Utilization and Storage to Enable a Net-Zero-CO2 Emissions Industry |
| Sep 22 | 15:10----16:00 | Wong Tzyy Yue        | Introduction to Biotechnology and Sustainable Food Production and Development                  |
| Sep 29 | 15:10----16:00 | John Harrison        | Sustainable Mountain Development (SMD) in Taiwan   |
| Sep 29 | 16:10----17:00 | Michal Fliegel       | Sustainable Development Through the Lens of International Relations                            |
| Oct 6  | 15:10----16:00 | Edi Sudianto         | Sustainability and Biodiversity  |
| Oct 6  | 16:10----17:00 | Jack Shen-Kuen Chang | Augmented Reality and Virtual Reality for STEM Education                                       |
| Oct 13 | 15:10----16:00 | Tailin Huang         | A Systems Perspective for the Risk of Sustainable Development                                  |
| Oct 13 | 16:10----17:00 | Tonni Kurniawan      | Digitalization in waste management   |
| Oct 20 | 15:10----16:00 | Jonathan Hobley      | The unbearable price of value  |
| Oct 20 | 16:10----17:00 | Dr. Raja             | Introduction to low-power energy Technologies for IoT applications                             |
| Nov 17 | 15:10----16:00 |                      | Student Group Presentation   |
| Nov 17 | 16:10----17:00 |                      | Student Group Presentation   |
| Nov 24 | 15:10----16:00 |                      | Student Group Presentation   |
| Nov 24 | 16:10----17:00 |                      | Student Group Presentation   |

**Grading:**

| Measurement                | Percentage % |
|----------------------------|--------------|
| Participation              | 15%          |
| Group Project Presentation | 85%          |

**Group Project Presentation:**

Each group has 4 members. Each project will culminate with a 20 minute presentation of results to the class. Presentations will be evaluated on their informative value, clarity, ability to answer questions, and the overall style. Group project will determine 85 percent of your semester grade. Presentation topic needs to be related to SDGs, and please receives my approval. You only need to submit the PPT, no need to submit the presentation report.

