



# Vegetation Ecology

植群生態學

EEB 5085, semester 108-1, **in English**

Instructor: **David Zelený** (澤大衛)

TA: Tsai, Cheng-Yang (蔡晟洋)

When & Where: Wednesday 14:20-16:20, R1217 (Life Science Building)

Link to CEIBA: [https://ceiba.ntu.edu.tw/1081EEB5085\\_VegEcol](https://ceiba.ntu.edu.tw/1081EEB5085_VegEcol)

## About the class

The course is introducing main concepts in vegetation ecology. We will focus on different aspects of plant ecology at the community level, including topics like vegetation-environment relationship, vegetation dynamics, plant invasions, diversity patterns, plant traits, vegetation classification, biomes of the World etc.

The course is focused on senior undergraduate and graduate students, who want to gain theoretical

knowledge about vegetation ecology. Additionally to theoretical lectures, I will also encourage students to deepen their view and interest by reading of suggested papers, as well as moderating discussions on potentially interesting or controversial topics related to vegetation ecology. To conclude the class, each student needs to write and present the essay on selected topic, and pass through oral examination.

## Overview of teaching schedule

(18 x 2 hours per week)

- Introduction, survey and sampling of vegetation
- Vegetation and environment
- Diversity patterns in vegetation
- Plant traits at community level
- Vegetation dynamics (succession, disturbance)
- Plant invasions and invasibility of plant communities
- Vegetation classification and maps
- Effect of climate change on vegetation
- Vegetation of Taiwan
- Biomes of the World
  
- Two discussion classes (presentation and discussion of assigned papers)
- Final presentations (last two classes)

## Class activity: assigned readings and discussion

Activity in the class will be based on reporting and discussion of assigned readings. There will be several (~6) assigned readings, each more or less related to individual topic of the class. **All students need to read the paper** and write a very brief “**paper summary**” into a Word file uploaded to CEIBA the day before the next class begins. We will spend two whole classes by group discussions, when each group presents one of the papers (short 5-10 minutes report, NOT longer), followed by brief discussion.

Check [instructions for assigned readings and discussion](#) to know how to do that (there is also Word file template, in which you will fill your paper summary).

## Evaluation

Part of the final evaluation will be written essay on selected topic (in English) and its presentation in the class. Final evaluation will be based on activity in the class, written essay and its presentation, and final oral exam.

Class activity (assigned readings and discussion in the class)	30% (60 points for assigned reading, 40 points for group discussion)
<a href="#">Vegetation Ecology</a> / 植群生態學	40% (essay + presentation)
Final examination (oral)	30%

## References:

- van der Maarel E. & Franklin J. (2012): *Vegetation Ecology. 2nd edition.* Willey-Blackwell [NTU online source](#)
- Mittelbach G.G. (2012): *Community Ecology.* Sinauer Associates.
- Mueller-Dombois D. & Ellenberg H. (1974): *Aims and Methods of Vegetation Ecology.* John Wiley & Sons.
- Archibold O.W. (1995): *Ecology of World Vegetation.* Chapman & Hall.

