

SEMESTER II
LSM3255 ECOLOGY OF TERRESTRIAL ENVIRONMENTS

Prerequisite: LSM2251

Workload: 26 lecture hours + 6 tutorial hours + 18 practical hours

This module will introduce students to the principles of terrestrial ecology, with a focus on tropical forests in Southeast Asia. Major topics will include diversity and distributions of terrestrial vegetation types, soils and nutrient cycling, animal-plant interactions (pollination, seed dispersal, herbivory), disturbance ecology and succession, energy flow and food webs, and population biology. Emphasis will be placed on how people are influencing these ecological processes through their activities (e.g. land-use changes, logging, hunting, fragmentation, climate change).

S/N	Topics	Lecture hours
1	Biogeography of terrestrial vegetation	2
2	Species diversity: patterns and mechanisms	2
3	Food chains	2
4	Carbon and nutrient cycles	2
5	Phenology	2
6	Reproductive biology: pollination and seed dispersal	2
7	Population ecology	2
8	Disturbance and succession	2
9	Forest fragment ecology	2
10	Protected areas and community-based conservation	2
11	Mangrove ecology	2
12	Climate change and terrestrial tropical ecology	2
13	Invasive species	2
Total Lectures: 26 h		
Practicals + Tutorials: 24h		
Total hours:		50h

TEXT BOOK (Recommended text):

Corlett, R.T. 2014. The Ecology of Tropical East Asia. Second Edition. Oxford University Press, UK. Available as an e-book at NUS Libraries.

Other readings of peer-reviewed literature will be assigned.

MODE OF ASSESSMENT:

CA (lab reports and quizzes [if applicable]): 50%

Final Exam: 50% (MCQ and essay questions, closed book): 50%

MODULE CO-ORDINATOR:

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