

Syllabus

Course Summary: This course reviews general ecology and introduces the ecology of Taiwan, its environments, habitats, and life forms.

Tentative Schedule:

Week	Lecture & Discussions	Chapter	Assignment Due
1	Introduction: questions ecologists are always asking	1 & 2	
2	Introduction to Taiwan: film Typhoon Island	1 & 2	
3	Taiwan geography & weather (coriolis effect, orthographic uplift)		
4	Water & Soil: Taiwan droughts, floods, & soil erosion	8,4	Project I
5	Evolution & Adaptation: Intertidal sea cucumber	4	
6	Diversity: Why are there so many species?	3	
7	Taiwan energy & nutrients (natural resources, dust storms)	3	Project II
8	Trophic levels, Nutrient cycles & food webs		
9	Midterm Exam		
10	Life Histories: Taiwan Mikado Pheasant & a bamboo-breeding frog	3,7	Project III
11	Measuring populations & population growth	6	
12	Extinction & invasive species: Taiwan's lowland forests, Fire Ants, Cane Toads	5	
13	Predation: Taiwan fisheries & sustainable yield	9	
14	Mutualism & Parasites: Ectomycorrhizae & dengue fever	10	Project: Final
15	Taiwan Ecosystems	10	
16	Global Climate		
17	Project Presentations & Big Picture	9 & 10	
18	Final Exam		

Daily Quiz: A quiz is given at the beginning of each class. Quiz also records attendance. Tardy or absent students cannot take the quiz.

Exams: There are two exams: midterm and final.

Observation Project: You and your group will identify a study site near the university. After getting my approval for this study site, you will visit your study site throughout the semester. You should make a minimum of two visits each week. One visit should always be on the same day at the same time. The second visit should be at random times on random days. For each visit, you will keep a log of observations. Logs will include photographs, species lists, population sizes and densities, and notes on phenology, weather conditions, animal activity, and human activity. Logs are due 3 times during the semester. At the end of the semester, you and your group present your findings to the class in a 5-minute talk.

Classroom Project: The data you collect for the Observation Project will be combined with data from other groups for the Classroom Project.

Textbook: Bridgman, C.L. 2012. Introducing Taiwan's Ecology. China Medical University. Taichung. Taiwan. <<http://www.shokulan.org/Courses/Eco/Bridgman2012IntroducingTaiwanEcology.pdf>>

Grading: Grades are based on group projects (50%), midterm exam (10%), cumulative final exam (20%), and attendance and quizzes (20%).

Course Policy:

- 1) In advance, tell me of problems meeting deadlines and assignments.
- 2) Assignments lose 10% for each week late.
- 3) Do your own work. Do not copy! Do not use computer translations!
- 4) You must cite your sources.
- 5) Copying is penalized by failure of the assignment (grade = 0%).

Exams & quizzes cover:

- lectures & blackboard
- textbook
- power point slides
- handouts & movies
- assignments
- projects
- previous tests & quizzes