Syllabus: List of lecture topics	Reading
How does one tackle a subject so large as tropical biology?	Pp. 1–5
Defining a tropical forest	7–15
Where are the tropics?	
Where will you find wet tropical forests?	
Latitudinal zonation of vegetation; climate diagrams	
Elevational zonation of vegetation	
Types of tropical forests	
Lowland rain forest structure	31–38
Some generalizations	
Stratification or not	
Light gaps and succession, the mosaic	
The forest understory	
Plant features	41–51
Drip tips	
Adaptations of photosynthesis	
Adaptations of climbing plants (vines and lianas)	
Epiphytes and hemiepiphytes	
Strangler figs (*Ficus*)	53–62
Special plant groups (e.g., bamboos, palms)	
Secondary compounds	89–101
Soil, litter, and decomposition	17–29
Importance of soil	
Chemical weathering in the tropics	
Critical soil nutrients	
Nitrogen fixation and mycorrhizal symbioses	
Epiphytes and lichens	
How much litter in tropical forests?	
Decomposers and rates of decomposition	
Termites as decomposers	
The tropical forest ecosystem	
Defining ecosystems and forest types	
Unique biotas of tropical regions	
Historical aspects of tropical biotas	197–205
Issues of species richness in tropical forests	
Alpha versus beta diversity	
Creatures of the rivers	
Freshwater systems of tropical landscapes	
Lungfishes	
Important fish clades of the Neotropics	
Giants of Amazonian waters and the 7 deadly plaques	
Freshwater reptiles	
The platypus	
Anuran biology	169–183
Malaria	

Biology and ecology of some tropical birds II
- Coloration of birds
- Sexual selection in birds
- Interesting mating systems of birds
- Precocial and altricial strategies
- Niche separation and bird guilds

The biology of bats 185–195
- General information on bats
- Bat wing, foot, and head factoids
- Echolocation
- Flying foxes of the tropics
- Ecologic specializations of microbats
- Principles of hang gliding
- Vertebrate gliders of the tropics (frogs, snakes, lizards, and mammals)

Plant reproduction 65–75
- Models for species packing
- Flower structure
- Pollination syndromes, esp. hummingbirds, bats, and hawkmoths
- Orchid flowering and pollination
- The puzzle of the fig
- Fruit dispersal by mammals

Reptiles in the forest
- Energy balance of vertebrate ectotherms
- Geckos, chameleons, iguanids, etc.
- Monitor lizards and the Komodo dragon
- Studies of *Anolis* lizards on foraging and niche breadth
- Snake biology and coloration
- Special groups and examples of tropical snakes
- Turtles of the forest floor

Mammals in the forest
- Overview of placental mammals
- General groups of tropical mammals
- Some large, ground-dwelling vegetarians
- Mammals of Nigeria's rain forest (example)
- Native mammals of the Neotropics
- Tree shrews
- Mammal groups occurring east of Wallace's Line

The tropical primates
- Major lineages of living primates
- Tarsiers
- Lorises
- Lemurs
- New World monkeys (platyrrhines: callitrichines, pithecines, atelines)
- Old World monkeys (catarrhines: colobines, cercopithecines)
- Living apes (gibbons, orangutan, gorilla, chimpanzees)