

SEMESTER I & II

LSM2252 BIODIVERSITY

Prerequisite: GCE 'A' level Biology or H2 Biology or equivalent or LSM1301 or LSM1301X

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

Course description:

This course provides life science majors with a critical introduction to the diversity of life on earth. The means to identify and differentiate major groups of living flora and fauna is emphasised. Unique characteristics about the life history and ecology of these groups will be discussed through local and regional examples and field trips to provide an opportunity to explore the biodiversity of selected ecosystems in Singapore. This foundation in biodiversity integrates conservation issues such as the biodiversity crisis to provide an understanding of the need for a diverse and intricate balance of nature.

S/N	Topics	Lecture hours
I.	Introduction to biodiversity, classification and nomenclature Issues in biodiversity conservation	2
II.	BOTANY Protista (photosynthetic), fungi, and lichen Lower plants Higher plants	8
IV.	ZOOLOGY Introduction, Animal Classification & Protists Parazoa & Radiata: Porifera, Cnidaria, Ctenophora Protostomes 1: Platyhelminthes, Annelida, Mollusca, Nematoda & Tardigrada Protostomes 2: Arthropoda & Onychophora Deuterostomes I: Echinodermata & Chordata Deuterostomes 2: Vertebrate Characteristics, Jawless Vertebrates, Fishes & Amphibia Deuterostomes 3: Amniotes: Reptiles, Birds & Mammals	16
	Total lecture hours:	26
	Practicals (18 hours) + Tutorials (6 hours)	24
	TOTAL	50 hours

TEXT BOOK (Either one of these recommended texts):

- *Biology*. Part V of 9th Ed., 2010. By Eldra Solomon, Linda Berg & Diana W. Martin. 1,234pp. Thomson Brooks/Cole
- *Campbell Biology*. Part V of 9th Ed., 2010. By J. B. Reece, Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V. Minorsky, Robert B. Jackson. 1,464pp. Pearson/Benjamin Cummings.
- *Animal Diversity*. 7th Ed, 2015. By Cleveland Hickman, Jr. and Larry Roberts and Susan Keen and Allan Larson & David Eisenhour (for zoology only)

MODE OF ASSESSMENT:

1. 50% Continual Assessment: tests, essays and a practical test.
2. 50% Final Examination (Open Book)

MODULE COORDINATORS/LECTURERS (Zoology):

Mr N. Sivasothi (Sem I)

(Tel: 6516-8869, E-mail: sivasothi@nus.edu.sg)

Dr Ng Ngan Kee (Sem II)

(Tel: 6601-1091, E-mail: dbsngnk@nus.edu.sg)

CO-LECTURERS (Botany):

Dr Amy Choong (Sem I & II)

(Tel: 6516-2707, E-mail: dbscmf@nus.edu.sg)