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| Module code | SB-2203 | | |
| Module Title | Animal Form and Function | | |
| Degree/Diploma | Bachelor of Science (Biology) | | |
| Type of Module | Major Core/Major Option | | |
| Modular Credits | 4 | Total student Workload | 8 hours/week |
| | | Contact hours | 6 hours/week |
| Prerequisite | SB-1201 Diversity of Life | | |
| Anti-requisite | None | | |
| Aims | | | |
| This module will help students to understand animal morphology, anatomy, structure and structural pattern, with emphasis on interpretation of structures in terms of phylogeny and function. This will include initially a survey of invertebrate and chordate phylogeny and classification. | | | |
| Learning Outcomes | | | |
| <i>On successful completion of this module, a student will be expected to be able to:</i> | | | |
| Lower order : | 30% | - Identify various structures associated with the organ systems -Dissect several representative organisms to study organ systems | |
| Middle order : | 60% | -Identify main groups of animals and understand evolutionary relationships between them | |
| Higher order: | 10% | - Relate form of organisms to function and explain structural adaptation of organisms to habitats | |
| Module Contents | | | |
| Invertebrates: | | | |
| -Locomotory organelles and organs | | | |
| -Hydrostatic skeleton and exoskeleton | | | |
| -Nutrition, feeding, excretion | | | |
| -Respiration and Nervous system | | | |
| -Reproduction | | | |
| Chordates: | | | |
| -Phylogeny and classification | | | |
| -The chordate bauplan; what is a 'fish'? | | | |
| -Vertebrate embryology and myology | | | |
| -Skin and integumentary skeleton; teeth | | | |
| -Endo- and dermaskelton, the cranium and the evolution of the suspensorium | | | |
| -Post-cranial and appendicular skeleton | | | |
| -The cardiovascular system and the gills | | | |
| -The gas bladder and the evolution of lungs | | | |
| -The digestive system and the urogenital system | | | |
| -The nervous system | | | |
| -Body size and allometry | | | |
| Assessment | Formative assessment | Tutorial assignments and feedback | |
| | Summative assessment | Examination: 60% | |
| | | Coursework: 40% | |
| | | - 6 practical assignments (40%) | |